

# RĀMĀYAṆ

## in Human Physiology



Discovery of the  
Eternal Reality of the Rāmāyaṇ  
in the Structure and Function  
of Human Physiology

Maharaja Adhiraj Rajaraam  
Tony Nader, MD, PhD



# RĀMĀYAṆ

in Human Physiology



Discovery of the  
Eternal Reality of the Rāmāyaṇ  
in the Structure and Function  
of Human Physiology

**Maharaja Adhiraj Rajaraam**  
**Tony Nader, MD, PhD**

**W**hat is the origin of the universe? When did it all start? Where is it going? What is mind? What is matter? What is consciousness? Is there one God? Many Gods? No God at all? What can science discover? Will everything one day be fully known? Or is there anything that will forever remain outside the human ability to understand? Are we asking the right questions? Or should we simply care for our day-to-day needs, and attend to our health care, government, financial systems, and all the practical concerns of life? Where are the answers?

Science attempts to explore as many topics as it possibly can. It aims at being objective and non-biased, and at discovering answers from reliable and repeatable relationships between causes and effects. Science studies the Laws of Nature.

The predominant approach to daily living—including personal, family, national, and international questions and decisions—remains, however, very subjective, based on consensus, education, and sometimes religious values and outlooks. This subjective approach relies upon individual preferences, feelings, intuitions, spiritual and moral convictions, desires, and motives.

This book takes one of the most purely subjective and spiritual records of knowledge, the Rāmāyaṇ, and compares it to one of the most objectively-studied and scientifically-described aspects of life: human physiology.

The research presented in this book illustrates the correlation between the characters and events occurring in the Rāmāyaṇ and the structures and functions of human physiology, concluding that ultimate subjectivity is ultimate objectivity, physiology is intelligence, matter is consciousness! It reveals that the same Laws of Nature express themselves on different levels of manifestation while remaining unchanged in their function and structuring dynamics.

It is not the philosophical, moral, religious, or even social and familial

underpinnings that are emphasized in this study, but the basic characters, events, places, and their interwoven dynamics as they reveal the structure and function of our human physiology. No value judgment nor philosophical or moralistic analysis is attempted.

The Rāmāyaṇ is not studied here as a text belonging to any one religion, nor to a particular race or belief system. The Rāmāyaṇ tells the story of Natural Law through its events and characters, just as Natural Law reveals its story in every individual physiology, life, and in the ever-expanding universe.



# RĀMĀYAṆ

## in Human Physiology

**Discovery of the  
Eternal Reality of the Rāmāyaṇ  
in the Structure and Function  
of Human Physiology**

**Maharaja Adhiraj Rajaraam  
Tony Nader, MD, PhD**

# RAMAYAN IN HUMAN PHYSIOLOGY

Discovery of the Eternal reality of the Rāmāyan  
in the Structure and Function of Human Physiology

by Tony Nader MD, PhD

22 July 2013

Published by Maharishi Press

Distributed by Maharishi University of Management Press  
1000 North 4th Street  
Fairfield, Iowa 52557  
USA

ISBN 978-0-923569-49-5

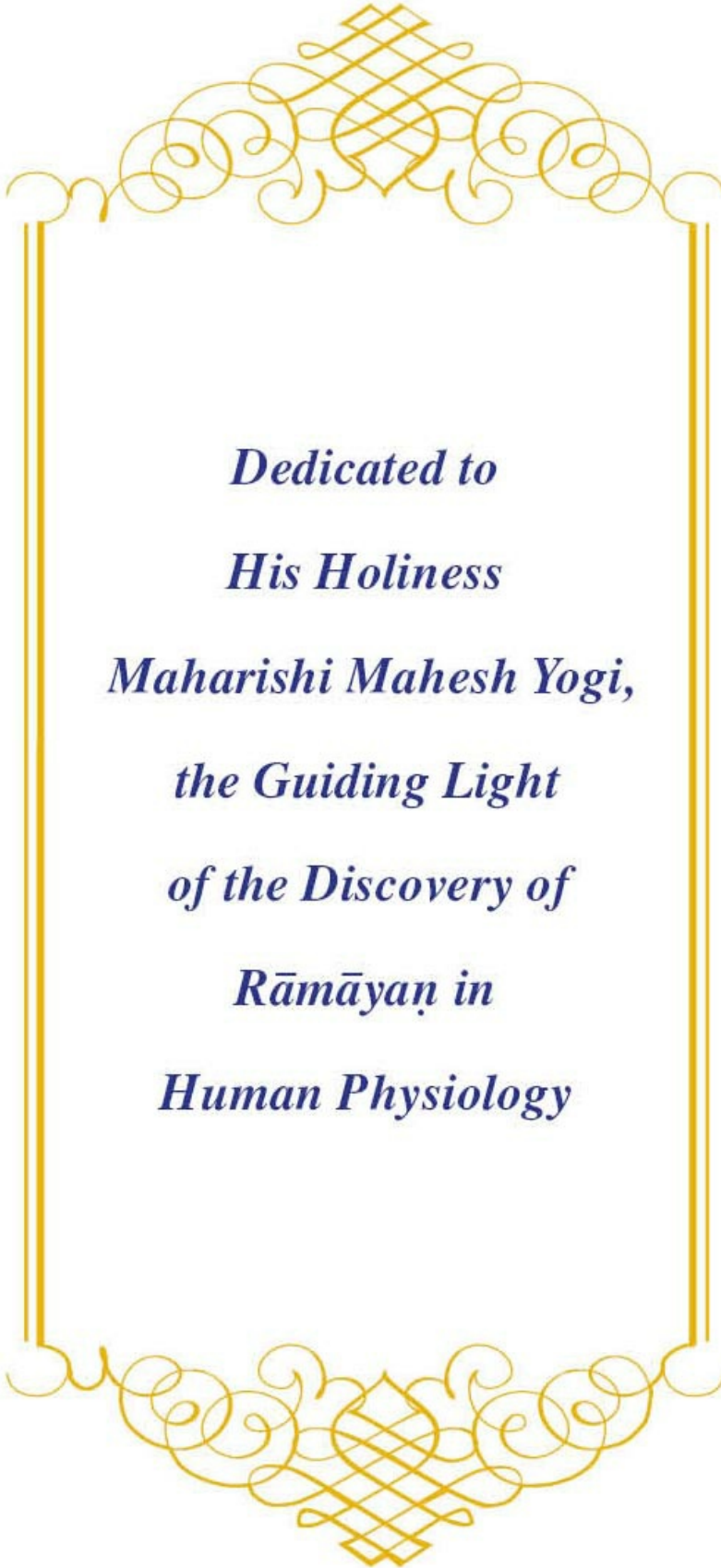
Transcendental Meditation, Maharishi, TM-Sidhi, Maharishi Ayurveda, Maharishi Sthapatya Veda, Global Country of World Peace, Maharishi Jyotish, Maharishi Pandit, Maharishi Vedic, Maharishi Vedic Science, Maharishi Vedic Science and Technology and many other terms used in this publication are subject to trademark protection in many countries worldwide, including the European Union.

The following are protected trademarks in the United States: Transcendental Meditation®, Maharishi®, TM-Sidhi®, Maharishi Ayurveda®, Maharishi Sthapatya Veda®, Global Country of World Peace, Maharishi Jyotish, Maharishi Pandit, Maharishi Vedic, Maharishi Vedic Science, and Maharishi Vedic Science and Technology.

© Maharishi Press, 2012. All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or



mechanical, including photocopying, recording, or by any information storage and retrieval system without permission in writing from the publisher.



*Dedicated to*  
*His Holiness*  
*Maharishi Mahesh Yogi,*  
*the Guiding Light*  
*of the Discovery of*  
*Rāmāyaṇ in*  
*Human Physiology*





**HIS HOLINESS MAHARISHI MAHESH YOGI**

*(Achievements on last pages)*

*Rāmāyaṇ is for  
full enlightenment;*

*Rāmāyaṇ is for perfection in  
every profession;*

*Rāmāyaṇ is for mastery over  
Natural Law;*

*Rāmāyaṇ is for fulfilment of any  
desire one may have.*

*Rāmāyaṇ is to create  
a perfect man,  
a perfect society,  
and a perfect world.*

*—Maharishi*



## The Author



Dr. Nader received his MD degree from the American University of Beirut, where he also studied internal medicine and psychiatry.

His PhD is in the area of Brain and Cognitive Science from the Massachusetts Institute of Technology (MIT), where he was also a visiting physician and Assistant Director at the Clinical Research Center. He completed his post-doctoral work as a Clinical and Research Fellow in Neurology at the Massachusetts General

Hospital, Harvard Medical School.

Dr. Nader has conducted research on neurochemistry, neuroendocrinology, and the relationship between diet, age, behaviour, mood, seasonal influences, and neurotransmitter and hormonal activity, and on the role of neurotransmitter precursors in medicine.

His interest in natural health care led him, while at MIT, to conduct research on Maharishi Āyur-Veda herbal and mineral preparations for their safety, their effects on memory and behaviour, and their ability to prevent ageing and disease, including cancer.

He also conducted original research on the effects of Maharishi's Transcendental Meditation and TM-Sidhi Programme in solving social and international problems.

Dr. Nader's desire to gain total understanding of the human mind and body—of consciousness and physiology—led him to the study of Maharishi's Vedic Science and Technology under the guidance of His Holiness Maharishi Mahesh Yogi.

He has organized courses and lectured widely on Maharishi Āyur-Veda, the ancient system of perfect health, in more than fifty countries, and held positions as a professor and director of Maharishi's Vedic Approach to Health Programmes.

He is currently International President of Maharishi Open Universities; International President of Maharishi's World Parliament of World Peace; Director of the Council of Supreme Intelligence of Maharishi's Global Administration through Natural Law; International President of Maharishi Āyur-Veda Universities; President of Maharishi University of Management, Holland; and President of Maharishi European University of Management, Brussels.

Dr. Nader was honoured by Maharishi as Custodian of the Constitution of the Universe in 1997. He was also given the title Chakravartī by Maharishi on the day of Guru Pūrṇimā, 1997.

On the basis of his knowledge of physiology, Dr. Nader has successfully correlated each aspect of the Vedic Literature to a specific area of physiology, with the conclusion that human physiology is the expression of Veda and the Vedic Literature. This is the subject matter of his first book, *Human Physiology: Expression of Veda and the Vedic Literature*.

In honour of his discovery, Dr. Nader received his weight in gold at a historic celebration in February 1998, at Maharishi Vedic University in Vlodrop, Holland, in the presence of Maharishi.

This discovery has been appreciated by scientists and political leaders throughout the world. Its practical application has been documented by original research conducted by medical doctors and scientists, which demonstrates the effectiveness of Vedic Sounds and Vedic Vibrations for the treatment of chronic disorders.

From 12 October to 16 October, 2000, during a five-day coronation



ceremony (Rājyābhishek), Dr. Tony Nader was crowned the First Sovereign Ruler of the Global Country of World Peace, with its Constitution in R̥k Veda, the Constitution of the Universe, and its authority in the invincible organizing power of Natural Law, which naturally and eternally governs the evolution of all life everywhere.

Dr. Nader, honoured with the title ‘Maharaja Adhiraj Rajaraam’,<sup>1</sup> in keeping with the tradition of the Royal Rulership of Rām—the Rule of Natural Law—graciously accepted his new sovereign role and announced the twelve Ministries of his Global Country of World Peace, each upheld by the total Constitution of the Universe.

### ***Footnotes***

1. Rajaraam was the childhood name of Brahmananda Saraswati, Maharishi’s Master.

**A TEXTBOOK OF LIFE FOR EVERYONE**

**Figure 24** Higher cortical layers of the central nervous system, cranial nerves, and spinal nerves correspond to the *Sthitas* of the first *Mandala* of *Rik Veda*.

**Figure 45** This shows a coronal section of the brain with its internal structures, including the basal ganglia, the thalamus, the hypothalamus, the subthalamus, etc., and their one-to-one relationship with the 9 planets, or *Graha*, of the solar system.

Figure 63 shows a right lateral view of the brain with the locations of the chapters of Yoga and the *Sūtras* corresponding to each of the cortical gyri (folds).

Sample pages from Dr. Nader's first book, *Human Physiology: Expression of Veda and the Vedic Literature*.



# Table of Contents

## Preface

## Introduction

Veda and Vedic Literature are the Sounds of the Unmanifest Becoming Manifest

The Rāmāyaṇ as the Expression of Human Physiology

## Section I: The Foundation of the Rāmāyaṇ in Human Physiology

### Chapter I: Maharishi's Vedic Science and Technology

*Ātmā*: The Absolute Level of Life

The Fundamental Level of Nature from the Perspective of Modern Science

The Unified Field Is the Constitution of the Universe

Maharishi's Vedic Science Describes the Sequential Unfoldment of Diversity from the Field of Unity

The Self-Interacting Dynamics of Consciousness—The Dynamics of *Ātmā*

Self-Interacting Dynamics of Consciousness as Sounds of the Veda

Vedic Cognition

Sequential Unfoldment of Veda and the Vedic Literature: Maharishi's

*Apaurusheya Bhāshya* of Ṛk Veda

Total Knowledge of Natural Law Is Contained Not Only in the Sounds of Veda, but Also in the Silent Gaps Between the Sounds

The Forty Branches of Veda and the Vedic Literature

Human Physiology Is the Expression of Veda and the Vedic Literature

Unfolding Our Cosmic Potential

Maharishi's Transcendental Meditation and TM-Sidhi Programme

Maharishi's Vision of Seven States of Consciousness

Transcendental Consciousness—The Fourth State of Consciousness

Cosmic Consciousness—The Fifth State of Consciousness

God Consciousness

Unity Consciousness

Higher States of Consciousness Bring Life into Accord with Natural Law  
Experiencing the Flow of Total Natural Law through the Sounds of Veda  
and the Vedic Literature

Summary

## **Chapter II: Introduction to Human Physiology**

The DNA Molecule: The Inner Intelligence of Life

The Biochemistry of Life and the Physics of the Unified Field

A Complete Science of Life

Physiology: The Structure and Function of the Human Body

Locating Totality at Every Point

The Cell and the Process of Development

Tissues, Organs, and Organ Systems

The Heart and Circulatory System

The Liver

The Renal System

The Endocrine System

The Nervous System

The Neuron and Neural Circuits

The Human Brain

Examples of the Correspondence between Human Physiology and Veda  
and the Vedic Literature

The Study of Physiology Is the Study of Veda

## **Chapter III: The Principal *Devatās*: Shiva, Viṣṇu, Brahmā**

Vedic *Devatās* in the Rāmāyaṇ

The Six Fundamental *Devatās* and Their Role in Human Physiology

Shiva

Viṣṇu

Brahmā

## **Chapter IV: The *Prakṛiti* of Shiva, Viṣṇu, and Brahmā**

The *Prakṛiti* of Shiva

The *Prakṛiti* of Viṣṇu

The *Prakṛiti* of Brahmā

The *Prakṛiti* of Shiva, Viṣṇu, and Brahmā in the Tissues

Saraswatī Is the Ectodermal Tissues

Lakshmī Is the Mesodermal Tissues  
Durgā Is the Endodermal Tissues  
Saraswatī, Lakshmī, and Durgā in Other Aspects of the Physiology  
The Experience of the Principal *Devatās* and Their *Prakṛiti* in Daily Life

## Section II: The Rāmāyaṇ in the Physiology

### Chapter V: The Principal Characters of the Rāmāyaṇ and their Physiological Roles

Basic Elements of the Structure of Human Physiology  
Devatās  
Rākshasas  
Ṛishis  
Kings  
Animals, Plants, and Inanimate Objects  
Relationships, Feelings, Emotions, Boons, and Curses

### Chapter VI: *Bāl Kāṇḍ, Sarga 1–7*

*Sarga 1*: Summary of the Entire Rāmāyaṇ  
*Sarga 2*: Vālmīki Records the Rāmāyaṇ  
*Sarga 3*: The Mechanics of Cognition  
*Sarga 4*: The Recitation of the Rāmāyaṇ by Kush and Lav  
*Sarga 5*: The City of Ayodhyā  
*Sarga 6*: King Dasharath  
*Sarga 7*: The Administration of King Dasharath

### Chapter VII: *Bāl Kāṇḍ, Sarga 8–16*

The Role of Vasishtha in Human Physiology  
*Sarga 9*: The *Yagya* for Rām's Birth  
*Sarga 10*: The Story of Ṛishi Ṛishyashṛinga  
*Sarga 11*: King Dasharath's Request for Ṛishi Ṛishyashṛinga  
*Sarga 12*: The Importance of Timing in King Dasharath's *Yagya*  
*Sarga 13*: Preparations for the *Ashwamedha Yagya*  
*Sarga 14–15*: The Incarnation of Vishṇu as Rām and His Brothers  
*Sarga 16*: King Dasharath's *Patnī* are Given *Pāyas*



## **Chapter VIII: *Bāl Kāṇḍ*, *Sarga* 17–26**

*Sarga* 17: The Birth of Many Heroes

*Sarga* 18: Rām's Birth

*Sarga* 19–22: The Meeting with Ṛishi Vishwāmitra

*Sarga* 23: The Story of Kāmadev

*Sarga* 24–26: The Story of Tātakā

## **Chapter IX: *Bāl Kāṇḍ*, *Sarga* 27–51**

*Sarga* 27–28: Rām's Training

*Sarga* 29: The Story of Vāman

*Sarga* 30: The Battle with Mārīcha and Subāhu

*Sarga* 31: Rām Travels to Attend King Janaka's *Yagya*

*Sarga* 32: The Story of Kusha

*Sarga* 33–36: The Birth of the River Gangā

*Sarga* 38–40: The Story of King Sagar

*Sarga* 41–44: Gangā Cleanses the Sons of King Sagar

*Sarga* 45–47: The Churning of the Ocean for the Nectar of Life

*Sarga* 48–51: The Story of Ṛishi Gautam and Ahalyā

## **Chapter X: *Bāl Kāṇḍ*, *Sarga* 52–76**

*Sarga* 52–56: The Story of Shabalā

*Sarga* 57–65: Vishwāmitra Becomes a *Brahm-Ṛishi*

*Sarga* 66–72: The Meeting with King Janaka

*Sarga* 73: Rām and Sītā's Marriage

*Sarga* 74–77: The Confrontation between Rām and Parashurām

## **Chapter XI: *Ayodhyā Kāṇḍ***

*Sarga* 1–10: Queen Kaikeyī's Boons and the Exile of Rām

*Sarga* 11: The Origins of Queen Kaikeyī's Boon

*Sarga* 12–15: Ṛishi Vasishtha's Visit

*Sarga* 16–53: Rām's Exile

*Sarga* 54–56: The Meeting with Ṛishi Bharadwāja

*Sarga* 57–68: Dasharath's Story

*Sarga* 69–116: Rām's Meeting With His Brother Bharat

*Sarga* 117–119: The Meeting with Ṛishi Atri

## **Chapter XII: *Āraṇya Kāṇḍ***

*Sarga 1–4: Rām’s Encounter with Virādha*  
*Sarga 5–10: Rām’s Visit to Rishi Sharabhanga*  
*Sarga 11–13: Rām’s Meeting with Rishi Agastya*  
*Sarga 11: The Story of Vātāpi and Ilvala*  
*Sarga 14: The Meeting Between Rām and Jatāyu*  
*Sarga 15–30: Rām’s Encounters with Shūrpanakhā, Khara, Dūshaṇa, and Trishiras*  
*Sarga 31–66: The Abduction of Sītā*  
*Sarga 67–68: The Death of Jatāyu*  
*Vedic ‘Birds’—Garuda, Jatāyu, and Sampāti in the Physiology*  
*Sarga 69–73: Rām’s Confrontation with Kabandha*

### **Chapter XIII: *Kishkindhā Kāṇḍ***

*Sarga 1–2: Rām Meets Hanumān*  
*Sarga 4–10: The Origins of Vālī and Sugrīva and the Story of their Conflict*  
*Sarga 11: Sugrīva Tests Rām*  
*Rām’s Arrows Return to His Quiver*  
*Sarga 12–28: The Fight Between Rām and Vālī*  
*Sarga 29: Sugrīva’s Delay*  
*Sarga 30–31: Lakshmaṇ’s Conversation with Sugrīva*  
*Sarga 32: Hanumān’s Reminder to Sugrīva to Begin the Search for Sītā*  
*Sarga 33: Lakshmaṇ’s Arrival and His Meeting with Tārā*  
*Sarga 34–37: The Meeting Between Lakshmaṇ and Sugrīva*  
*Sarga 38: Lakshmaṇ and Sugrīva Go to See Rām*  
*Sarga 39–43: Sugrīva Commands the *Vānara* to Search for Sītā*  
*Sarga 44: Rām Gives His Ring to Hanumān to Present to Sītā*  
*Sarga 45–46: Sugrīva’s Knowledge of the Geography of the World*  
*Sarga 48–50: The Search for Sītā*  
*Sarga 50–52: The Cave of Māyā*  
*Sarga 53–55: The Debate Among the *Vānara* Leaders*  
*Sarga 56–63: The Meeting with Sampāti*  
*Sarga 64–67: Hanumān’s Flight to Lankā*  
*Maharishi’s TM-Sidhi Programme*  
*Hanumān’s Practice of Yogic Flying*

### **Chapter XIV: *Sundar Kāṇḍ***

*Sarga 1: Hanumān Encounters Surasā and Simhikā*  
*Sarga 2–14: Hanumān Enters the City of Lankā*  
*Sarga 15–37: Hanumān’s Message to Sītā*  
*Sarga 38–40: Sītā’s Story of the Crow*  
*Sarga 41–48: The Destruction of Rāvaṇ’s Garden and the Binding of Hanumān by Indrajit’s Arrow*  
*Sarga 49–50: Hanumān’s Meeting with Rāvaṇ*  
*Sarga 51–54: The Burning of the City of Lankā*  
*Sarga 61–68: The Confrontation between the Vānara in the Madhuvan Grove and Hanumān’s Report to Rām*

## **Chapter XV: *Yuddha Kāṇḍ* and *Uttar Kāṇḍ*—Rāvaṇ and His Brothers in Human Physiology**

*Uttar Kāṇḍ, Sarga 9–34: The Story of Rāvaṇ*  
The Specifying Value of Natural Law  
The Story of Jaya and Vijaya, the Gatekeepers of Viṣṇu  
The Self-Referral Process of Evolution  
Rāvaṇ’s Boons  
Rāvaṇ’s Brothers  
Kumbhakarṇa  
Vibhīṣaṇ  
*Yuddha Kāṇḍ, Sarga 1–3: Hanumān’s Description of Lankā*  
*Yuddha Kāṇḍ, Sarga 4: The Science of Omens*  
*Yuddha Kāṇḍ, Sarga 6–20 and 24–41: Rāvaṇ Consults with His Advisors*  
*Yuddha Kāṇḍ, Sarga 21: The Crossing to Lankā*

## **Chapter XVI: *Yuddha Kāṇḍ*—The Battle Between Rām and Rāvaṇ**

*Sarga 24–36: Rāvaṇ’s Spies Report*  
*Sarga 37–41: Sugrīva Attacks Rāvaṇ*  
*Sarga 42–43: The Battle Between the Armies of Rām and Rāvaṇ*  
*Sarga 44: Indrajit Attacks Rām and Lakṣhmaṇ*  
*Sarga 45–46: Indrajit Continues to Overcome the Vānara Army*  
*Sarga 47–50: Garuda Awakens Rām and Lakṣhmaṇ*  
*Sarga 51–59: Rāvaṇ Momentarily Enters the Battle*  
*Sarga 60–67: The Defeat of Kumbhakarṇa*  
*Sarga 68–71, 75–79, 93–98: Various Encounters Between Vānara*

Chieftains and *Rākshasa* Leaders  
*Sarga* 72: Rāvaṇ Recognizes Rām  
*Sarga* 73–74: Indrajit’s Destructive Arrow and Hanumān’s Rescue of  
Rām, Lakshmaṇ, and the Army of *Vānara*  
*Sarga* 80–83: Indrajit’s *Māyā*  
*Sarga* 84–91: Indrajit’s Defeat  
*Sarga* 92: Rāvaṇ’s Intent to Kill Sītā  
*Sarga* 99: The Final Battle Begins  
*Sarga* 99–101: Features of the Battle  
*Sarga* 102: Indra’s Chariot  
*Sarga* 103–104: Rāvaṇ’s Charioteer Momentarily Withdraws  
*Sarga* 105–106: Ṛishi Agastya’s Aid  
*Sarga* 107: Rām Reviews His Previous Encounters  
*Sarga* 108: Brahmā’s Arrow  
*Sarga* 109–114: Rāvaṇ’s Funeral and Vibhīṣaṇ’s Coronation  
*Sarga* 115–117: Rām and Sītā  
*Sarga* 120–128: The Return to Ayodhyā

## Section III: Rām, Sītā, and Hanumān

### Chapter XVII: The Path of Rām in India and in Human Physiology

The Path of Rām in India and in Human Physiology  
The *Ṛishis* in the Brainstem

### Chapter XVIII: The Story of Sītā

*Purusha* and *Prakṛiti*  
The Process of Expansion  
The Role of Sītā in the Rāmāyaṇ  
The Ordeal of Fire  
The Cycles of Natural Law  
The Conclusion of the Rāmāyaṇ and Higher States of Consciousness  
The Sons of Rām

### Chapter XIX: The Story of Hanumān

The Origins of Hanumān  
The Blood-Brain Barrier



Specific Versus Holistic Perception  
The Pacification of Vāyu and Hanumān's Boons  
Hanumān's First Meeting With Rām  
Diseases of the Pituitary Gland  
Hanumān Is the Holistic Value of Natural Law  
Feedback Systems of the Endocrine System  
Balanced and Unbalanced Functioning of the Immune System and  
Disorders of the Endocrine Glands

## Section IV: Genealogy of Creation

### Chapter XX: The Genealogy of Creation, Part 1

Rām's First Meeting with the Eagle Jatāyu  
Hierarchy of Beings and Their Place in Human Physiology  
The Cardiovascular System  
Vishṇu and Lakshmī, *Purusha* and *Prakṛiti*  
Sītā, the Cardiovascular System  
    The Twofold Nature of Sītā  
    The Conduction System of the Heart  
    Coronary Arteries Forming the Rāsa Maṇḍala—The Crowns of Rādhā  
    and Ramā  
The Descendants of Daksha  
Divided and Undivided: Diti and Aditi  
Subclavian Artery and Its Branches: Tāmrā, the Mother of Birds, and Her  
    Descendants  
Paradoxes Resolved: Daughter or Granddaughter  
Pulmonary Veins and Artery: Vinatā and Kadrū  
The Lungs: Garuda, the King of Birds  
Molecular Carrier Systems: Aruṇa, Jatāyu, and Sampāti

### Chapter XXI: The Genealogy of Creation, Part 2

Arteries of the Chest  
Segmental Parietal Arteries of the Thoracic Aorta: The *Patnī* of  
    Dharmadev  
Non-segmental and Visceral Arteries of the Thoracic Aorta: The *Patnī* of

Kashyap

Arteries of the Abdominal Area and the Lower Parts of the Body

Non-segmental and Visceral Arteries of the Abdominal Aorta: Daughters  
of Krodhavashā

Satī

Segmental Parietal Arteries of the Abdominal Aorta

The Arterial Tree in Human Physiology

## **Conclusion**

## **Appendix I: Summary of the Rāmāyaṇ Story**

English Translation of the First *Sarga* of Vālmīki Rāmāyaṇ

## **Appendix II: Individuals, Relationships, Places, and Events in the Rāmāyaṇ and Their Corresponding Physiological Form**

Overview Charts (Rāmāyaṇ and Maharishi's Vedic Science)

Anatomical Illustrations

## **Appendix III: A Glimpse of Maharishi's Achievements**

## **Glossary**

# Table of Figures

1.1 Unification of the four fundamental forces of nature

1.2 The origin of law and its evolution

1.3 Maharishi's commentary on Rk Veda Samhitā

1.4 The four stages of the transformation of one Vedic sound into another within the silent gap between them

1.5 The 40 branches of Veda and the Vedic Literature and their corresponding aspects in human physiology

1.6 Maharishi Technology of the Unified Field

2.1 The double helix of the DNA

2.2 Unified Field Chart for Physiology

2.3 A cell with its main internal parts

2.4 Cell division

2.5 The entire physiology emerges from three embryonic layers

2.6 The two main branches of the circulatory system are the arterial system and the venous system

2.7 The structure of a neuron

2.8 The four cortical lobes with their corresponding chapters in the Yog-Sūtra

2.9 Each Yoga Sūtra corresponds to one of the cortical gyri (folds)

2.10 The bridge to Lankā (Nalasetu) corresponds to the cerebellar peduncles

3.1 Traditional representation of Shiva

3.2 Traditional representation of Viṣṇu

3.3 Traditional representation of Brahmā

4.1 Traditional representation of Shiva and Pārvatī

4.2 Traditional representation of Lakshmī

4.3 Traditional representation of Saraswatī

4.4 Traditional representation of Durgā

5.1 Elements of the Rāmāyaṇ and human physiology

6.1 Rām corresponds to the somato-sensory and supplementary motor cortex in the brain

6.2 King Dasharath corresponds to the midbrain

6.3 The Sarayu River corresponds to the superficial middle cerebral vein

6.4 The city of Ayodhyā corresponds to the area of the brain around the superficial middle cerebral vein

6.5 The fortress protecting Ayodhyā corresponds to the blood-brain barrier



6.6 Kashyap, Dasharath, and Rām

6.7 The ministers of King Dasharath

6.8 The informants of King Dasharath correspond to the sensory input systems

7.1 Ṛishi Vasishtha's first incarnation corresponds to the general somatic sensory column of the brainstem

7.2 Indra, the King of the *Devatās*, corresponds to the mind

7.3 Ṛishi Vasishtha's third incarnation corresponds to the globus pallidus

7.4 Sumantra, the charioteer of King Dasharath, corresponds to the interpeduncular nucleus in the midbrain

7.5 Ṛishi Ṛishyashṛinga corresponds to the periaqueductal grey matter of the midbrain

7.6 The 6 sets of fasciculi proprii and the 6 main books of Āraṇyak

7.7 Ṛishi Vibhāṇḍak corresponds to the grey matter of the pons

7.8 Queen Kausalyā corresponds to the middle cerebral artery

7.9 Queen Kaikeyī corresponds to the anterior cerebral artery

7.10 Queen Sumitrā corresponds to the posterior cerebral artery

7.11 The main arteries of the brain and the mothers of Rām, Rāvaṇ, and their brothers and sisters

7.12 Bharat corresponds to the cingulate gyrus and the prefrontal cortex

7.13 Lakshmaṇ corresponds to the occipital lobe

7.14 Shatrughna corresponds to the temporal lobe

8.1 Ṛishi Vishwāmitra corresponds to the vestibular system

8.2 Kāmadev corresponds to the nucleus accumbens and the medial forebrain bundle

8.3 Shiva's third eye corresponds to the pineal gland

8.4 Ṛishi Agastya corresponds to the olivary nucleus

8.5 Tātakā, a *Rākshasī*, corresponds to the disturbed functioning of a pontine artery (inflammation)

8.6 Rām's battle with the *Rākshasī* Tātakā

9.1 Vāman, Viṣṇu's fifth incarnation, corresponds to the motor cortex

9.2 The *Rākshasas* Mārīcha and Subāhu correspond to inflammatory and growth factors

9.3 Shiva's Bow corresponds to the vertebral column

9.4 The river Gangā corresponds to the cerebrospinal fluid

9.5 The 7 streams of Gangā correspond to the 7 structures of the ventricular system

9.6 King Sagar corresponds to the pons and medulla oblongata

9.7 The *Ashwamedha Yagya* corresponds to transformations within the hippocampus

9.8 The four stages of the transformation of one Vedic Sound into another

9.9 Kalki's horse corresponds to the hippocampus

9.10 The 60,000 sons of King Sagar correspond to the sensory fibres projecting up to the cortex

9.11 Ṛishi Gautam corresponds to a nucleus of the medulla oblongata

9.12 Ahalyā, Ṛishi Gautam's *Patnī*, corresponds to an artery of the medulla oblongata

10.1 Shabalā, the 'wish yielding cow', corresponds to the medial forebrain bundle and mammillary bodies

10.2 Parashurām, Viṣṇu's sixth incarnation, corresponds to the amygdala

10.3 Parashurām's axe corresponds to the corpus callosum

11.1 The servant Mantharā corresponds to a malformed cerebral vein

12.1 Virādha, a *Rākshasa*, corresponds to the disturbed activity of the autonomic ganglia around the heart

12.2 *Brahma-loka* corresponds to the superior layer of the cerebral cortex

12.3 The *Rākshasas* Ilvala and Vātāpi correspond to the digestive enzymes

12.4 Jatāyu corresponds to the circulating carrier proteins

12.5 Sampāti, the brother of Jatāyu, corresponds to the fixed carrier proteins in cell membranes

12.6 The *Rākshasī* Shūrpaṇakhā corresponds to the disturbed functioning of the labyrinthine artery

12.7 The *Rākshasas* Khara, Dūshaṇa, and Trishiras correspond to the vestibulocerebellum (imbalanced function)

12.8 The *Rākshasa* Mārīcha corresponds to the angiogenesis factors (growth of new blood vessels)

12.9 The *Rākshasa* Kabandha corresponds to disturbed functioning of the putamen and caudate nucleus

13.1 Hanumān corresponds to the biochemical messengers

13.2 The *Vānara* chief Sugrīva corresponds to the anterior pituitary gland

13.3 The *Vānara* chief Vālī corresponds to the posterior pituitary gland and pituitary stalk

13.4 The original *Vānara* king Ṛiksharāj corresponds to the primordial cells of the pituitary gland

13.5 The 7 *sāl* trees correspond to the 7 columns of the brainstem

13.6 Nerve impulses activate the end organs of action resulting in sensory feedback to the brain

13.7 Angada corresponds to the input to the pituitary gland via the pituitary stalk



13.8 The *Gandharvas* correspond to the autonomic ganglia around the heart

13.9 Tārā, the *Patnī* of Sugrīva, corresponds to the veins and arteries of the pituitary portal system

13.10 Swayamprabhā corresponds to the cofactors and stimulating factors of the immune system

14.1 The *Rākshasī* Simhikā corresponds to a structure that blocks transmitters or cofactors

15.1 Ṛishi Pulastya corresponds to the general visceral motor column of the brainstem

15.2 The 10 heads of Rāvaṇ correspond to the 10 lobes of the cerebellum

15.3 Rāvaṇ's 20 arms correspond to the 20 sublobes of the cerebellum

15.4 Devavārṇinī corresponds to the superior cerebellar artery

15.5 Kaikasī corresponds to the anterior inferior cerebellar artery

15.6 Rākā corresponds to the posterior inferior cerebellar artery

15.7 Jaya corresponds to the raphe nucleus

15.8 Vijaya corresponds to the locus caeruleus

15.9 The *Rākshasa* Hiranyāksha corresponds to the vestibulocerebellum (early stage of development)

15.10 Varāha, Viṣṇu's third incarnation, corresponds to the brainstem

15.11 The *Rākshasa* Hiraṇyakashipu corresponds to the intermediate hemispheres of the cerebellum

15.12 Narasimha, Viṣṇu's fourth incarnation, corresponds to the diencephalon

15.13 The steps of transformation of Jaya and Vijaya under the influence of different incarnations of Viṣṇu

15.14 Kumbhakarna, one of Rāvaṇ's brothers, corresponds to the fastigial nucleus of the cerebellum

15.15 The area of Drumakulya corresponds to the kidneys

15.16 *Nalasetu* (the bridge to Lankā) corresponds to the cerebellar peduncles

15.17 Sāgar (ocean) corresponds to the cerebrospinal fluid of the fourth ventricle

16.1 Indrajit, the eldest son of Rāvaṇ, corresponds to the mind of the cerebellum (the essence of its function)

16.2 Indrajit's serpent arrows correspond to nerve cells

16.3 Garuda, the king of the birds, corresponds to the tissues of the lungs

16.4 Hanumān brings the mountain of herbs to restore consciousness to Rām and Lakshmaṇ

16.5 The mountains and valleys of the Himālayas correspond to the gyri and sulci of the cortex

17.1 Regions of India corresponding to brain structures

17.2 Path of Rām in India during his Exile

17.3 Path of Rām in the Brainstem

17.4 Sumantra, King Dasharath's charioteer, corresponds to the interpeduncular nucleus in the midbrain

17.5 The Tamasā river corresponds to the basal vein at the base of the brain

17.6 The Vedashruti, Gomatī, and Syandikā rivers correspond to the upper, middle, and lower basilar venous plexus

17.7 The river Gangā corresponds to the cerebrospinal fluid

17.8 King Guha corresponds to the median raphe nucleus

17.9 Ṛishi Bharadwāja corresponds to the dorsal nucleus of the raphe

17.10 The confluence between the Yamunā and Gangā rivers corresponds to the area of the cerebral aqueduct

17.11 Ṛishi Vālmīki corresponds to the pontine reticular formation, the nucleus raphe pontis

17.12 Chitrakūt (a mountain range) corresponds to the pons

17.13 The many *Āshram* of the *Ṛishis* correspond to the brainstem nuclei

17.14 The *Rākshasa* Virādha corresponds to the disturbed activity of the autonomic ganglia around the heart

17.15 Ṛishi Sharabanga represents the central reticular group of the medulla oblongata

- 17.16 Ṛishi Sutīkshṇa corresponds to the paramedian reticular nuclei
- 17.17 Ṛishi Dharmabhṛit corresponds to the lateral reticular group
- 17.18 Ṛishi Agastya corresponds to the inferior olivary nucleus
- 17.19 The eagle Jatāyu corresponds to the circulating carrier proteins
- 17.20 The *Rākshasī* Shūrpaṇakhā corresponds to the disturbed functioning of the labyrinthine artery
- 17.21 The *Rākshasas* Khara, Dūshaṇa, and Trishiras correspond to the vestibulocerebellum (imbalanced function)
- 17.22 The *Rākshasa* Mārīcha corresponds to angiogenesis factors (growth of new blood vessels)
- 17.23 The *Rākshasa* Kabandha corresponds to disturbed functioning of the putamen and caudate nucleus
- 17.24 Vibhīshaṇ, a brother of Rāvaṇ, corresponds to the dentate nucleus of the cerebellum
- 17.25 Indrajit, the eldest son of Rāvaṇ, corresponds to the mind of the cerebellum (essence of its function)
- 17.26 Kumbhakarṇa, a brother of Rāvaṇ, corresponds to the fastigial nucleus of the cerebellum
- 17.27 Rāvaṇ corresponds to the lateral hemisphere of the cerebellum
- 17.28 *Ṛishis* in the brainstem
- 17.29 The 7 brainstem columns correspond to the *Sapta Ṛishis* (the 7 *Ṛishis*)
- 17.30 Ṛishi Marīchi corresponds to the special visceral motor column of the



brainstem

17.31 Ṛishi Vasishtha's first incarnation corresponds to the general somatic sensory column of the brainstem

17.32 Ṛishi Atri corresponds to the special somatic sensory column of the brainstem

17.33 Ṛishi Pulaha corresponds to the special visceral sensory column of the brainstem

17.34 Ṛishi Angiras corresponds to the general visceral sensory column of the brainstem

17.35 Ṛishi Pulastya corresponds to the general visceral motor column of the brainstem

17.36 Ṛishi Kratu corresponds to the general somatic motor column of the brainstem

19.1 Rāhu, the ascending lunar node, corresponds to the head of the caudate nucleus

19.2 Hanumān brings an entire Himālayan mountain covered with healing herbs

19.3 Hanumān crosses the ocean from India to Lankā

20.1 Arterial system

20.2 Mahalakshmī corresponds to the heart. Rādhā and Ramā correspond to the right and left sides of the heart

- 20.3 The conduction system of the heart (Kṛishṇa and Viṣṇu)
- 20.4 Right and left coronary artery (Rādhā's and Rāmā's crown)
- 20.5 Ṛk (collapse of silence into dynamism)—Vortex of heart muscle
- 20.6 Dakṣha corresponds to the primordial cells
- 20.7 Asikṇī, the *Patnī* of Dakṣha, corresponds to the aorta, the origin of all arteries
- 20.8 Aditi corresponds to the right common carotid artery. Diti corresponds to the left common carotid artery
- 20.9 Tāmrā, the mother of birds, corresponds to the subclavian artery
- 20.10 Bhāsī, one of Tāmrā's five daughters, corresponds to the vertebral artery
- 20.11 Shyenī, one of Tāmrā's five daughters, corresponds to the axillary artery
- 20.12 Dhṛitarāshtrī, one of Tāmrā's five daughters, corresponds to the internal thoracic artery
- 20.13 Shukī, one of Tāmrā's five daughters, corresponds to the thyrocervical trunk
- 20.14 Kraunchī, one of Tāmrā's five daughters, corresponds to the costocervical trunk
- 20.15 Vinatā, the mother of birds, corresponds to the pulmonary veins
- 20.16 Kadrū, the mother of serpents, corresponds to the pulmonary artery
- 20.17 Kadrū's 1,000 serpent sons correspond to the bronchioles and alveoli

of the lungs

20.18 Indra's rain, *Indravṛishti*, corresponds to the pulmonary surfactant

20.19 Aruṇa, a son of Vinatā, corresponds to the precursors of the molecular carrier system of the body

21.1 The 10 *Patnī* of Dharmadev correspond to the 10 parietal arteries of the thoracic aorta

21.2 Yāmī corresponds to the subcostal artery

21.3 Sādhyā corresponds to the middle intercostal artery

21.4 Arundhatī corresponds to the third posterior intercostal artery

21.5 Bhānu corresponds to the fourth posterior intercostal artery

21.6 Lambā corresponds to the fifth posterior intercostal artery

21.7 Marutvatī corresponds to the sixth posterior intercostal artery

21.8 Muhūrtā corresponds to the eighth posterior intercostal artery

21.9 Sankalpā corresponds to the ninth posterior intercostal artery

21.10 Vasu corresponds to the tenth posterior intercostal artery

21.11 Vishwā corresponds to the eleventh posterior intercostal artery

21.12 Danu corresponds to the bronchial artery

21.13 Irā corresponds to the oesophageal artery

21.14 Munī corresponds to the pericardial artery

- 21.15 Arishtā corresponds to the mediastinal arteries
- 21.16 Khasā corresponds to the superior phrenic artery
- 21.17 Krodhavashā corresponds to the abdominal aorta
- 21.18 Kālakā corresponds to the inferior phrenic artery
- 21.19 Analā corresponds to the gastric artery
- 21.20 Surasā corresponds to the splenic artery
- 21.21 Surabhī corresponds to the common hepatic artery
- 21.22 Rohiṇī corresponds to the hepatic artery
- 21.23 Gandharvī corresponds to the gastroduodenal artery
- 21.24 Mṛigamandā corresponds to the superior mesenteric artery
- 21.25 Ṛiksha corresponds to the inferior pancreaticoduodenal artery
- 21.26 Sṛimara corresponds to the ileal and jejunal arteries
- 21.27 Chamara corresponds to the colic arteries
- 21.28 Shārdūlī corresponds to the suprarenal artery
- 21.29 Mātangī corresponds to the renal artery
- 21.30 Bhadramadā corresponds to the ovarian or testicular artery
- 21.31 Mṛigī corresponds to the inferior mesenteric artery
- 21.32 Harī corresponds to the common iliac and internal iliac artery
- 21.33 Shwetā corresponds to the external iliac artery

21.34 The *Ashtadiggajāḥ*, 8 elephants that support the globe, correspond to the 8 parts of the quadriceps muscles

21.35 Satī, Shiva's *Prakṛiti*, corresponds to the median sacral artery

21.36 The 4 daughters of Asiknī correspond to the 4 lumbar arteries

21.37 Rām's arrows correspond to the nerves in the pelvic area

21.38 The descendants of Asiknī and Daksha and their corresponding roles as arteries

21.39 The family tree of Asiknī's daughters corresponds to the arterial tree



# Preface

What is the origin of the universe? When did it all start? Where is it going? What is mind? What is matter? What is consciousness? Is there one God? Many Gods? No God at all? What can science discover? Will everything one day be fully known? Or is there anything that will forever remain outside the human ability to understand? Are we asking the right questions? Or should we simply care for our day-to-day needs, and attend to our health care, government, financial systems, and all the practical concerns of life? Where are the answers?

## *Subjectivity and Objectivity*

Sages, religious leaders, wise men and women, philosophers—some of whom are adored as saints—prophets, and divine incarnations have given their visions, revelations, teachings, moral precepts, logics, and enigmas. Their answers, along with myriad interpretations of their answers, sometimes agree but other times diverge. This approach to knowledge is known as the **‘subjective approach to gaining knowledge’**.

In modern times, subjectivity has come to be viewed as biased and partial, and though this could be true in some cases, in essence subjectivity simply reflects the process of ‘self-referral’—one refers to oneself in order to make a decision, give an opinion, assess a situation, or express a worldview. In this path of acquiring knowledge are the spiritual experiences, personal experiences, beliefs, cultures, religions, traditions, hypotheses, suppositions, axioms, and so on.

Over the past two centuries, another approach to knowledge has risen in significance: the **objective approach**. This is the scientific approach, with its rigorous methodologies that combine logical analysis with experimentation, while searching for what is verifiable, repeatable, and reliable. This method seeks answers that are independent of personal opinion, subjective

experience, or point of view.

Both the subjective and objective approaches emerged in the minds of men and women who were looking to organize their lives in the middle of a world of opportunities and challenges, and who aimed at acquiring as much knowledge as possible in every conceivable area.

### ***Spiritual and Physical***

Scientists naturally direct their quest toward understanding the physical, tangible, observable aspects of the universe. Some of the ancient beliefs that arose from the subjective approach—such as ‘the earth is the center of the solar system and the universe’—have since been discredited, and scientists have gradually begun to distance themselves from subjectivity to the extent that it has become improper for a scientist to speak on anything spiritual or metaphysical.

For some time now, the two worlds—the subjective (spiritual, pure philosophy, and belief) and the material or physical (concrete, observable, and measurable)—have drifted apart.

### ***Rāmāyaṇ in Human Physiology***

This book takes one of the most purely subjective and spiritual records of knowledge, the **Rāmāyaṇ**, and compares it to one of the most objectively studied and scientifically described aspects of life: **human physiology**.

Under the guidance of His Holiness Maharishi Mahesh Yogi, between 1992 and 1999 I had the special privilege of studying Veda and correlating each of the 40 branches of the Vedic Literature with the human physiology.

Beginning in October 2000, and continuing for about a year, I went into retreat, studying Vedic science and technology in depth with Maharishi, and also spending long periods in meditation and silence. It was during this time that the foundation of the relationship between Rāmāyaṇ and the human

physiology was elaborated.

The research presented in this book illustrates the correlation between the characters and events occurring in the Rāmāyaṇ and the structures and functions of human physiology, concluding that ultimate subjectivity is ultimate objectivity, physiology is intelligence, matter is consciousness!

Having received a rigorous scientific education myself, I can foresee questions and reservations from some scientists who might object to the comparison of an ancient epic such as the Rāmāyaṇ to human physiology. In this study I take an ancient story and its characters—which include divine incarnations, demons with several heads, super-heroes, flying and talking monkey-like beings and birds, sages who cast curses and have supernatural powers, people who are turned into stone or into another creature and then revived to their original shape, other beings who become huge then very small, etc.—and compare them to structures and functions of the human body, such as the heart, the brain, the arteries, the hormones, the neuronal nuclei and fibres, and so on.

With this in mind, I felt to write this preface for the reader, scientist or not, who wishes to probe into the logic of how this proposition can be understood and how it might fit into the modern rational, objective, and scientific framework, as well as into personal beliefs and perceptions of what reality is.

### ***Modern Science***

Modern science is the epitome of the objective approach. Scientific findings have greatly advanced human understanding in many fields and have provided some mastery over many natural phenomena. As its instruments of investigation improve in sophistication—and as knowledge expands and becomes more accurate—science continues to evolve.

But what do we really know from science about life?

To make a long story short, let's consider the salient features of the appearance and evolution of life on earth, as described and generally accepted today among scientists.

According to the Big Bang theory,<sup>1</sup> about fourteen billion years ago one unfathomable reality manifested in a Big Bang as a rapidly expanding universe containing an extremely hot and dense soup of matter. Today the universe has cooled down, but continues to expand. Because this expansion takes place in all directions and follows set patterns, cosmologists and physicists call it the expanding universe. Various assumptions and theories exist about the forces involved in this continuing process of expansion and its exact progression in time and space.

### *Singularity*

The attempt to probe the state of the universe at a time earlier than  $10^{-43}$  seconds after the Big Bang leads to a fascinating discovery: the concept of classical space and time breaks down. This period 'before' the universe was  $10^{-43}$  seconds old is called the **Planck epoch**, a unique period that is beyond the concept of classical space and time, and in which the Laws of Nature exist in a unified state.<sup>2</sup>

Between  $10^{-43}$  seconds and  $10^{-36}$  seconds after the Big Bang the temperature was high enough that three of the four fundamental forces—electromagnetism, weak nuclear interaction, and strong nuclear interaction—were still unified in one fundamental force. The gravitational force, however, had separated at this time as an individual, and extremely faint, force. This is usually referred to as the **grand unification epoch**. The physics at this temperature is not fully understood, with different theories proposing different scenarios.

According to the widely accepted inflationary model, between  $10^{-36}$  seconds and about  $10^{-32}$  seconds (that means at the end of the grand unification epoch), the universe underwent an extremely explosive expansion by a factor

of at least  $10^{78}$  in volume. This is referred to as the inflationary epoch, after which the universe continued to expand at a far more moderate rate.

Cosmologists predict a state of **singularity** before the Big Bang, based on general relativity. With the discovery of quantum theory (in particular, quantum gravity) and modern inflationary cosmology, different scientists have examined this state of singularity in different ways. In every case, physicists generally expect fully unified conditions, as expressed by a complete unification of all the Laws of Nature, to have existed during the Planck epoch, which as we have seen transcends the notion of classical time and space and is ‘prior’ to the quantum birth of the manifest, evolving universe.<sup>3</sup> We therefore have a fully unified state ‘before’ the Big Bang. Physicists further tell us that even as various forces and particles later manifest and appear to be different on the surface, they are indeed—and always continue to be—the expressions and manifestations of the same Unified Field.

### ***The Unified Field***

This tells us, as far as we understand from modern science, that all that there is—all the Laws of Nature, all forces and all matter, whose constituents are excitations of fundamental matter fields—originate from one unified source. Thus, the forces of Nature ruled by corresponding laws, even though seemingly varied and complex, are founded upon four fundamental forces that science has determined to be the expressions of one fundamental **Unified Field**, an all-permeating, non-changing, source of all forces, energy, and particles, a field of pure existence.

The Unified Field is not just an historic reality that existed at the beginning of creation during the primordial Planck epoch, displaying infinite dynamism governed by the unified state of all the Laws of Nature, but is always there at every point of the manifest universe and in all points together. Indeed, as has been explained earlier, the Planck epoch is beyond the concept of classical time and therefore represents an eternal reality, whose dynamics is found



whenever one probes time scales smaller than  $10^{-43}$  seconds or distance scales smaller than  $10^{-33}$  cm. In fact, everything is nothing but an expression of this Unified Field.<sup>4</sup>

## *Life*

As the temperature cooled due to the rapid expansion of the early universe, a sequence of phase transitions resulted in the sequential differentiation and separate emergence of the different forces and the various matter fields with their corresponding different specific characteristics. During this process, at the end of the inflationary period—at about  $10^{-33}$  to  $10^{-32}$  seconds—a huge amount of released vacuum energy was transformed into high energy particles, of which a very tiny fraction exist today. These constitute the present matter particles. These particles formed atoms and molecules, which formed gross matter that became, among other things, stars, galaxies, and planets.

Our solar system, including planet earth, emerged roughly in its present shape about 4.5 billion years ago.<sup>5</sup> The earth continued to cool and modify its physical structure and atmosphere, and aided by favorable temperature and other conditions, organic material was formed. The first living structures, prokaryotes, appeared on earth around 3.5 billion years ago.

These first structures (today's bacteria) are cells containing DNA, but with no cell nucleus. They are the oldest resilient form of life, and survive under the harshest and most hostile conditions. Nonetheless, they adapt, learn new strategies, and teach each other by exchanging appropriately mutated DNA.

## *DNA: The Stuff of Life*

To a large extent, life is centred around DNA. DNA molecules regulate and control all the activities of the cell. In many ways DNA is the essence of life, the ego of the cell. It is not so much that DNA serves the cell, rather it is the cell that is directed to protect, maintain, and help reproduce the DNA. **DNA**

is **the stuff of life**.

As DNA expanded its information code and acquired more complexity, different life forms appeared. The first clusters of cells combined with individual elements (cells) to form tissue-like structures. Then multicellular organisms appeared, which gradually developed a nervous system, a heart, and other organs.

### ***Human Consciousness***

It was not until a half million years ago—at least according to modern scientific approximations—that the first signs of human-like beings appeared. About 130,000 years ago modern humans (*homo sapiens*) spread over the earth. By around 40,000 years ago they had developed a sophisticated culture, as evidenced by their use of tools and cave paintings. It is thought that by that time they had already developed complex spoken language. The main evolutionary progress, however, was in the appearance of the high level of **human consciousness**, which was not seen in other species.

By this time, DNA had created an individual who could think and feel, understand and share, record and transmit, plan and decide, all on a conscious level. The knowledge available in DNA about life and living had made another quantum jump. Now it was capable of reflecting on itself through the human mind and consciousness, and could fathom through the intellect the laws that conduct the affairs of the universe.

### ***Human Society***

**Human society** emerged as another level of the manifestation of Natural Law. Like atoms coming together to make molecules, molecules collecting to create cells, and groups of cells forming tissues and organs and organisms, individual humans created societies, traditions, cultures, nations, and humanity.

## ***Natural Law***

What makes the atoms, molecules, and cells come together as they do? The Laws of Nature. Every level of manifestation—from the Unified Field into energy, matter, life, consciousness, and society—expresses the same **Natural Law**, but in different forms.

The details of Natural Law can be found at the level of the Unified Field in seed form, and theoretical physicists and mathematicians describe them through their formulae and equations, such as the Lagrangian of the Unified Field. At the early stages of the Big Bang, around the Planck epoch, everything was concentrated, diffuse, and non-particulate energy. This energy then took shape in fields, forces, particles, and the whole universe. The universe, therefore, is the cosmic shape of the non-manifest pure potential energy and structure of Natural Law. The seed contains the tree in pure potentiality; the tree is the manifest shape of the inner hidden dynamics available in the seed.

At one level, Natural Law is pure energy; on another it is particles and matter; then it is unicellular and multicellular organisms, society, etc. Natural Law manifests itself in a hierarchy of forms or expressions, from its most compact expression in the Lagrangian of the Unified Field, to more diverse and complex expressions in the Lagrangians of the diverse forces, to the laws of atomic physics, chemistry, biology, psychology, consciousness, and society, but it remains the same Natural Law.

## ***Natural Law and the Will of God***

There is law in our universe. The appearance of anything—matter, planets, life, humans—can theoretically be the result of, or arise from,

1. An orderly process of creation from a creator with goals and intentions;
2. An orderly process of creation without a creator but nonetheless following strict laws;

3. An original state of all possibilities that leads to our universe as one manifestation among many others.

In any of the above possibilities, and in all other imaginable ones—whether arising from pure orderliness with one predefined scheme or from all possibilities—the universe as we know it could not exist without law and structure.

It is beyond the scope of this book to try to forward a personal belief or conviction about the origin of structure and law. Nor is it my intention to analyse the degrees of freedom or determinism that each aspect of the manifest universe displays. What is important here is that there *is* law, even if this law seems different at the classical Newtonian level than what is observed at the fundamental level of the Planck scale, which is characterized by the existence of a space-time foam whose dynamics is governed by the laws of quantum gravity.

Whatever degrees of freedom or choice are considered, the choices that lead to the fastest steps of progress and evolution, and to the highest possible quality of life, are the ones that obey *The Law*—those laws that can be called **Natural Law** from an objective perspective or the **Will of God** from a religious or subjective angle of consideration.

When we go to school, set up research experiments, or examine life—whether philosophically, spiritually, religiously, or politically—and when we study language, science, art, geography, history, psychology, sociology, engineering, medicine, etc., we are directly examining, studying, pondering, or creating theories about Natural Law and its manifestations. And while the expressions of Natural Law can apparently be quite varied, the same laws are always available at all levels of Nature and the universe. The underlying laws are the same even when they express themselves in different shapes, forms, components, and levels of sophistication, complexity, and completeness.

Natural Law/the Will of God not only creates and organizes our physical and

biological universe, it also manages human life, society, and the world. It can be appreciated through mathematical formulae, laws of physics, chemistry, biology, anatomy, or physiology, but can also be understood in terms of family, social, and national structures. In its most unified and nearly abstract form in the objectively assessed physical universe, it is the Unified Field. In its unified and most abstract (but very real) form on the subjective level of experience, it is pure consciousness—transcendental, self-referral, pure Being, pure existence.

The possibilities for the expansion of knowledge on an objective scientific level, and the resulting improvements in the quality of life, can continue to unfold and reach newer and more expanded horizons. We have already moved from the caves to cars, planes, phones, and the internet; and we have grown from the understanding of a solar system centred around the earth to one that includes an ever-expanding universe with almost uncountable stars and galaxies. However, until science discovers the intricacies of all that there is to know under all circumstances, in every field of physics, chemistry, biology, psychology, mind-body, human spirituality, sociology, cosmology, etc., individuals will still have to rely to a large extent on their subjective references. These references are needed to guide all individuals in daily living, in managing their needs, instincts, desires, and expectations, in planning their present and future, and coping with their past. They are also needed to prevent and avoid the dangers that can come from isolated and partial knowledge of Natural Law—such as the devastation of the environment by some technological advances, the threat from nuclear power, the side effects of modern medicine, etc. These subjective references have always been, and continue to be, necessary to create social laws and ensure order in society and between societies.

It is furthermore not enough to intellectually know what the laws are. Individuals and societies must learn how to live in accordance with those laws. From a purely objective perspective, the task is daunting and seems utopian, and one might conclude that life could continue to improve but be

always experienced in limitations and imperfections.

This book, *Rāmāyaṇ in Human Physiology*, compares the dynamics, structures, and patterns of Natural Law available in two very different and apparently unrelated expressions of Natural Law: human physiology and anatomy on one hand, and on the other a social, familial, philosophical, political, and religious epic with natural and supernatural conditions, as well as profound human emotions and relations with extraordinary events and characters. Towards the end of the narrative, the Rāmāyaṇ reveals a most glorious achievement: Rām Rāj—the establishment of Heaven on Earth, where everything is lived in perfection—life in tune with total Natural Law on the level of individual and society.

### ***The Subjective Approach***

Though educated in the objective, scientific perspective, I also had the opportunity to learn about Natural Law from a different approach. I feel most fortunate to have been guided in the supreme tradition of Vedic Masters by Maharishi, one of the greatest sages of all time. Maharishi taught in the eternal Vedic Tradition bestowed upon him by his Master, Brahmananda Saraswati, Jagadguru Shankaracharya of Jyotir Math, who gave Maharishi the knowledge of complete integration of life—physical and spiritual—in both theory as well as through direct personal experience.

With Maharishi's technologies of consciousness, such as his Transcendental Meditation (TM) and advanced techniques, millions of people around the world have directly experienced their inner, unbounded, pure, transcendental Being—their inner Self and the Self of everything and everyone, the Unified Field of Natural Law, the home of all the Laws of Nature. Hundreds of scientific research studies have demonstrated the profound benefits to mind, body, intellect, behaviour, and society that result from TM as well as from the collective practice of its advanced programmes.

My experience with this technology was so profound and convincing on the



physical, objective levels, and also in terms of subjective feeling, intellectual understanding, and overall personal satisfaction, that I felt to devote whatever energy and time I have to explore it and share it with others.

It was a great fortune that Maharishi described his vision, cognition, and profound understanding about the structure of Natural Law, how it functions, from where it emerges, and how it manifests.

Over the centuries, numerous belief systems and beautiful traditions of knowledge have arisen in many cultures. Maharishi expressed great respect towards all of them and encouraged scholars and scientists to highlight the fundamental unity in their original teaching, spirituality, and worldview. Those who learned from Maharishi were always inspired by his emphasis on the development of the full potential of every individual. Remove stress and strain; gain deep rest; experience the inner Self and become established in your true, inner, cosmic nature—in Maharishi's teaching, this is the basis for gaining true, absolute knowledge.

Maharishi emphasized that the Self of everyone is the Unified Field of all the Laws of Nature—that with the experience of pure Transcendental Consciousness through TM, one gains inner peace, happiness, clarity of perception, and enlightenment, as all aspects of life improve. He compared pure, self-referral consciousness to the sap in a flower and the root of a tree, emphasizing: 'water the root to enjoy the fruit'. In highlighting the importance of direct experience as more fundamental than theoretical understanding, he showed why his teaching is not based on any belief system or way of life. And he pointed out how the Vedic Tradition—and indeed most major traditions of knowledge, wisdom, and religion—place humans on a supreme level in creation.

सद्धर्घं खलु इदं ब्रह्म

*Sarvam Khalu Idam Brahm*

*(Chhāndogya Upanishad, 3.14.1)*

*All this is Brahm—Totality, WHOLENESS.*

It was Maharishi who brought to my understanding how Natural Law is present in an unmanifest form in the Unified Field, and how this reality can be thought of as the ‘Will of God’ when viewed from the perspective of religion. It is the same Natural Law, he explained, that expresses itself throughout the universe, manifesting according to the same pattern and the same orderly progression as it forms structures and performs functions. Natural Law is the same at every level, even though it may appear differently. Indeed, the universe itself is a manifestation of Natural Law, and therefore its structure reflects the structure of Natural Law. If men and women are themselves expressions of Wholeness, Totality, and are ‘made in the image of God’, their physical structure must therefore be similar to the most complete and pure expression of Natural Law. This, Maharishi explained, is what ‘everyone is cosmic’ means.

Vedic Expressions such as *Aham Brahmāsmi* ‘I am Totality’, as well as similar expressions from other traditions—including ‘man was created in the image of God’—have been simplistically understood as allegories, intended to uplift the human spirit, or at best to suggest that humans can experience and commune with the divine in their consciousness! Maharishi took this much farther, however, emphasizing that the cosmic, divine nature of everyone is not only found in terms of their consciousness, but can also be located at the very basis of their DNA, their cells, and their whole physiology.

The ancient Vedic tradition of India, from which Maharishi came to us, has an extensive literature, with thousands of books recorded in the Sanskrit language. These manuscripts are the written records of an oral tradition, but as they were written down over the recent centuries they came to be translated, interpreted, and commented upon in many different ways. They were subsequently seen as religious in nature by much of India’s population,

often seeming incomprehensible, scattered, and even contradictory.

Maharishi, however, restored the proper understanding of the literature. He pointed out that the texts were not creative, poetic, artistic, philosophical, or historical compositions, but rather the concise descriptions of Natural Law. Although some texts refer to historical events, fundamentally the Vedic Literature directly describes Natural Law through its very structure and function. The meaning, poetry, philosophy, and wisdom of the Vedic Literature were not that important to Maharishi—it was its structure!

In the early 1970's, Maharishi clarified this point of his teaching. He began with the most revered branch of this literature, Ṛk Veda, and described its structure. Starting from the first sound and syllable, he showed how each sound, each word, each line, etc., transforms into the next, and how they sequentially emerge and progress. Without reference to the commonly held translation of any word or phrase, he showed the perfect internal organization of each expression and how it develops into the next; and likewise he demonstrated how each chapter, book, and branch of the entire Vedic Literature sequentially emerges. This was like the anatomy of the Veda. In this way Maharishi organized the age-old scattered Vedic Literature into a perfect science of life, and brought to light the fundamental structure and function of Natural Law as available in Veda and the Vedic Literature.

Maharishi's analysis of the organization and structure of the Vedic Literature is a remarkable achievement, but his most significant contribution in this context was his cognition that its structure is the structure of Natural Law, and that this structure is the foundation of all knowledge, all sciences, and every discipline.

But what does Maharishi's description of the structure of Veda prove? What does it really mean that the first sentence in Ṛk Veda contains three phrases of eight syllables each, which correspond respectively to fundamental qualities of consciousness such as the observer, the process of observation, and observed, etc.? By itself it seems to reveal nothing more than a beautiful

harmony, order, and balance—more like poetry with rhythmical structures than a thesis on Natural Law!

In what way, then, does this particular pattern or structure reflect the structure of Natural Law?

If we were asked to examine this question using the scientific method, we would proceed in this way:

1. Do we know what the structure of Natural Law is? If we know, we could compare this structure with the texts of the Vedic Literature and the job would be done.
2. If we do not know the structure of Natural Law scientifically, we would have to first show the logic behind the proposition: does it make sense based on what we already know and what we can expect? And is there a structure to Natural Law, and if so what is it likely to be?
3. What is the logic and justification for using the structure of the Vedic Literature? Why not use any other pattern, structure, or even other literature, such as philosophical or religious texts? The fact that Maharishi describes a correspondence between Veda and Natural Law does not alone prove that it is true, for there are many different proposals regarding Nature and its underlying basis. The human mind can consider and examine in many different directions. What is likely to lead to a scientific discovery and what will remain science fiction?

In answer:

1. From a scientific perspective, we do not know exactly what the structure of Natural Law is, but we have some idea as to its patterns. Mathematicians and theoretical physicists offer more or less definitive theories and formulae that describe the inner dynamics of the Unified Field. Some of the greatest physicists and scientists of consciousness have examined with Maharishi the structure of the Lagrangian of the

Unified Field<sup>6</sup> and have found compelling resemblances to the structure of Rk Veda as brought to light by Maharishi. Indeed, Maharishi often described Veda as the Constitution of the Universe precisely because it is the blueprint of creation—in its sequence of sounds and gaps, Veda embodies the most fundamental dynamics of Natural Law, the most basic level of the Laws of Nature.

Maharishi and the Vedic Tradition describe the universe as the expression of the self-interacting dynamics of a Unified Field of pure, unbounded consciousness. Modern physics similarly describes the process of manifestation from the self-referral, unbounded, fully entangled, unmanifest field of pure potentiality to the more expressed levels, such as the different levels of separate quantum fields, elementary particles, etc., as a process of sequential symmetry breaking through which the Laws of Nature become diversified. Although physicists do not typically speak about consciousness, the qualities that they associate with the Unified Field are the same as those that describe this level of consciousness.

2. When something is hidden from view, the only way to understand it is to study what it does, what it produces, how it reacts. Only then can one describe its characteristics and postulate its nature! This is how theoretical physics and mathematics attempt to describe the Unified Field. From a scientific perspective, the only way the structure of Natural Law (as available at the level of the Unified Field) can be assessed is by observing what it produces: what dynamics evolve from it? How does it express itself? This simply means that in order to infer the structure of Natural Law, we have to examine every aspect of life, including the quantum mechanical, the classical, DNA, cells, organisms, planets, galaxies, as well as culture, religion, society, and so on.

If we find that the structures of these aspects of life are similar to Veda, it would confirm our axiom that Veda is a replica of the structure of

Natural Law. On the other hand, if only one corresponds to the structure of Veda, it might suggest coincidence. But if the fundamental aspects of life and the universe correspond in structure to Veda, it would point to a pattern.

Indeed there is a pattern: the Lagrangian of the Unified Field corresponds to Veda; the structure of the 40 branches of Veda and the Vedic Literature correspond one to one to the structure of DNA, the cell, and the human anatomy and physiology as described in the publication *Human Physiology: Expression of Veda and the Vedic Literature*; in this book, *Rāmāyaṇ in Human Physiology*, we will see that even the fabrics of family, society, nation, human passions, emotions, relationships, hopes, vocations, etc., as depicted in this famous epic, are based on the same pattern of structure and function available in human physiology.

3. The study of the finest fabrics of Natural Law is often in the domain of pure mathematics. Mathematics is pure logic, almost totally based on pure subjectivity. It is our human nervous system that allows computation, logic, analysis and synthesis, deduction, and inference. Scientists, just like everyone else, readily accept what their brain tells them while it is consciously computing data and analysing it on the basis of reason and logic. Our nervous system not only computes individual datum isolated by our intellect, but is also capable of automatically and spontaneously computing collections of data that embody more holistic shapes, structures, concepts, feelings, visions, cognitions, etc.

Through the Vedic technologies of consciousness, such as Maharishi's Transcendental Meditation Programme, our human physiology can, mainly through the nervous system, directly experience pure consciousness, the Unified Field of the Laws of Nature: Natural Law. These Vedic Technologies have shown profound positive, life-supporting effects in the lives of millions of people and their societies, demonstrating from the level of applied science the intimate connection



between the different aspects of Natural Law.

By experiencing the Unified Field, individuals improve in all aspects of their lives: physical, mental, emotional, spiritual, and social. When a group of individuals practises Maharishi's Vedic technologies of consciousness together, there is a marked reduction in crime and international conflicts, and an increase in positive trends such as peace, prosperity, and creativity. These results have been observed in many parts of society and documented scientifically.

In the **objective approach**, an instrument only gives accurate results within the range of its inherent limitations. In the same way, subjectivity will always depend on the subject's intelligence, sensitivity, wakefulness, and capacity to fathom deeper truths of life and the universe around him. The reliability of **subjective knowledge** will thus always depend upon the level of the subject's development.

It is fortunate that by opening the awareness to the total potential of Natural Law and allowing one to directly experience the Unified Field, Maharishi's Vedic technologies of consciousness demonstrate the possibility of directly fathoming the home of all the Laws of Nature, which turns out to be accessible only through pure subjectivity. Ultimate objectivity is ultimate subjectivity. These are some of the applied, practical, and objective verifications that make it compelling to study the relationship of Veda with Natural Law and with human physiology.

Other philosophies, religious texts, and writings certainly express profound truths about the nature of creation, Natural Law, and the Will of God. They describe these truths in different languages that can be translated and commented upon. It is exceptional that Maharishi highlighted the sounds of Veda and the structure of those sounds rather than their meaning. This was the basis of my previous work, *Human Physiology: Expression of Veda and the Vedic Literature*. And even in the present publication, it is not the philosophical, moral, religious, or

even social and familial underpinnings that are emphasized in the study, but the basic characters, events, places, and their interwoven dynamics as they reveal the structure and function of our human physiology. No value judgement nor philosophical or moralistic analysis is attempted. The Rāmāyaṇ is studied here as the dynamics of pure consciousness—the dynamics of Natural Law and its structure and function, as expressed in one level of manifestation and compared to another, the human physiology.

The Rāmāyaṇ is not studied here as a text that belongs to any one religion, nor to a particular race or belief system; nor does it belong to any single man or woman. The Rāmāyaṇ tells the story of Natural Law through its events and characters just as Natural Law reveals its story through other aspects of the Vedic Literature, as well as in every individual physiology, life, living, and the ever expanding universe.

*Tony Nader, MD, PhD*  
*12 January 2012*

### ***Footnotes***

1. Apart from some modifications at the very first instants of creation, the Big Bang theory is the prevailing cosmological model for the early universe.
2. This period is called the Planck epoch because the so-called Planck mass appearing in the formulae of quantum gravity determines the circumstances for the breakdown of classical space and time. The phase transition from the Planck epoch to the consecutive epoch is characterized by the existence of an infinitely dynamic space-time foam, exhibiting quantum correlations between different space-time regions.
3. A note for the expert in cosmology: With the advancements in superstring theory and M-theory (which developed out of superstring theory), alternate or more refined cosmological models have been proposed. These are known as ‘brane cosmology models’, including the ‘ekpyrotic model’, the ‘cyclic model’, and the ‘pre-Big Bang model’, which describe specific dynamics preceding the Big Bang, such as collisions between branes (specific higher-dimensional objects occurring in superstring theory), or

which assume that the Big Bang was preceded by a Big Crunch, and possibly that the universe endlessly cycles through such processes again and again. However, even for those cosmological models the physics characteristic for the Planck epoch is as relevant as it is for the conventional type of cosmological models, since the Planck epoch is not an epoch that can be simply located at a specific moment of time—by definition the Planck epoch is beyond the notion of classical time.

4. The mathematical description of the quantum state of the universe through a timeless ‘Wave Function of the Universe’, clearly supports the idea that the manifest evolving universe is an expression of the underlying quantum reality of the Unified Field, which exists perpetually beyond the concept of time.

5. As science has uncovered more and more about the evolution of the universe, these time periods have evolved from a few thousand years, to millions of years, and now to billions of years. In the future, they may change again as the result of further scientific discoveries.

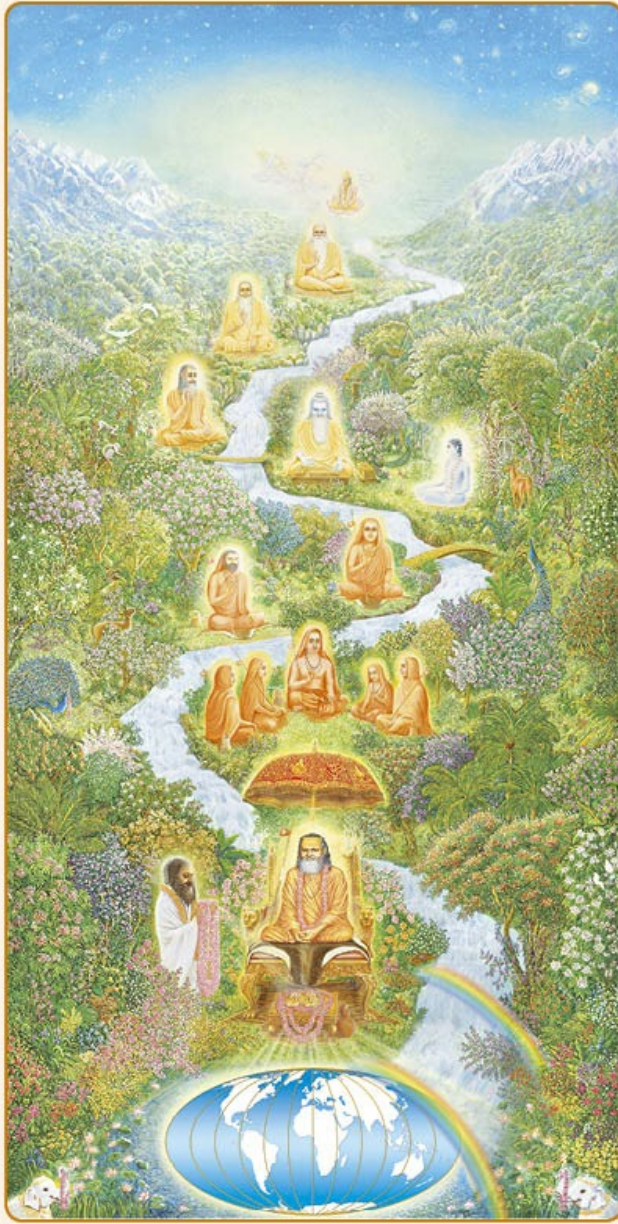
6. Or more precisely, the Lagrangians of superstring theory and supergravity, which are the mathematical formulae that describe the dynamics and symmetries of the Unified Field.



# Introduction

**T**he Rāmāyaṇ is part of Veda. The term Veda in the Sanskrit language means ‘knowledge’. Traditionally, Veda and its literature—the Vedic Literature—is held to be the total knowledge of life and creation, transmitted orally for thousands of years by the Vedic families of India. In recent times, Veda and the Vedic Literature has been recorded in book form, and examined from different perspectives depending on the interests, level of knowledge, experience, and understanding of its commentators.

Over the past 50 years, His Holiness Maharishi Mahesh Yogi revealed the complete knowledge of Veda, its structuring dynamics in the Vedic Literature, and its infinite organizing power.



Maharishi received the supreme wisdom of Veda from his master, Bhagavan Brahmananda Saraswati, Jagadguru Shankaracharya of Jyotir Math, Himālayas, a shining light in the line of the great teachers of the Holy Tradition of Vedic Masters, which includes Vasishtha, Vyāsa, Shankara, and their disciples.

Maharishi organized the scattered Vedic Literature into 40 branches and showed that it is a perfect science of life. One of the 40 branches is called Itihās, which includes the two great Vedic Epics, Mahābhārat and Rāmāyaṇ. These contain accounts of sages, *Ṛishis* (Seers) and kings, *Devatās* (Divine Beings) and *Rākshasas* (demons), the incarnations of Divinities, great wisdom and teachings, ideal values and behaviour, as well as plots between and within families, battles, wars, and the actions and interactions of many



different types of beings.

## **Veda and Vedic Literature Are the Sounds of the Unmanifest Becoming Manifest**

Maharishi demonstrated that the entire Vedic Literature is the first expression of unmanifest, pure Being becoming manifest on the vibrational level of sound, and that everything in the universe sequentially emerges from the unmanifest through these vibrations. Every galaxy, every planet, every individual human being, every living creature, as well as every *Devatā* and every *Rishi*, are all expressions of the one unbounded ocean of pure Being.

Maharishi further revealed that in its most fundamental value, the Vedic Literature embodies the total potential of Natural Law, the totality of all the Laws of Nature that create and administer every aspect of our universe. Maharishi's great gift is the technologies through which we can dive deep within our own self-referral consciousness and directly experience these Laws of Nature and their dynamic interactions, and unfold them in our own awareness; and he has given us a complete science of consciousness so that we can intellectually understand the Laws as they express themselves in human physiology in both structure and function.<sup>1</sup>

Veda is total knowledge, and always expresses the knowledge of Natural Law—how it unfolds and interacts and guides the destiny of everyone and everything. The expressions of Veda are first pure reverberation, but to make Veda more accessible to those who may not wish to dwell in the fine, pure value of sound and silence, Veda also expresses itself on a level in which the Laws of Nature and their actions and interactions are depicted in stories and epics, which can be understood by everyone. In this way, the Laws of Nature are personalised as men, women, demons, *Devatās*, or *Rishis*, whose activities and interactions are shown in the form of stories. In these narrations, they might fight with one another, help each other, teach others; or they might feel angry or happy or glorious; or they could create trouble or transform life, or have families and children.



So when we consider the stories of the Vedic Literature from the perspective of Maharishi's Vedic Science, we have a new platform—we understand that they are not just events from the distant past, but are also the descriptions of how Natural Law creates and evolves, how it interacts with itself as it evolves, what brings Karma, what creates relationships between different aspects of the whole structure and function of the entire universe, and so forth.

## **The Rāmāyaṇ as the Expression of Human Physiology**

The Rāmāyaṇ revolves around Rām. Rām, often referred to in other branches of the Vedic Literature as Lord Rāmachandra, was born in the family of the Ikshvāku race of the solar dynasty. His father was Dasharath, his mother Kausalyā, and throughout the story Rām performed great feats while destroying negativity and restoring the world to a perfect state. We may think of the Rāmāyaṇ as a series of historical events from the distant past, when Rām came to Earth as an incarnation of Vishṇu and defeated the demon Rāvaṇ, but Maharishi explains that the story is a description of total Natural Law—its characters and their actions and interactions unfold the story of Natural Law as it expresses itself into all aspects of creation.

In this study we will examine the Rāmāyaṇ to see how it displays Natural Law in our physiology. Human physiology is Veda and the Vedic Literature; it is the embodiment of total Natural Law. Total Natural Law includes everything in the universe. The Rāmāyaṇ, which embodies Total Natural Law, must also be within us. It does not matter what nationality we are, or what our worldview may be, the story of the Rāmāyaṇ is taking place within each of us at every moment.

This journey of understanding the Rāmāyaṇ in human physiology will give us a profound insight into Natural Law and also into our own body. We will see how the social relationships in the Rāmāyaṇ, such as those between parent and child, or between brothers and sisters, describe physiological realities. We will see a mother nourish, protect, and give to her children, and how this

relationship describes a physiological structure nourishing and protecting the part of the body corresponding to her children; and we will see how each of the different types of characters—*Ṛishis*, *Devatās*, *Rākshasas*, animals, etc.—all reflect distinct physiological structures and functions, and how their actions and interactions consistently portray the same interactions of the human physiology.

We will also see that each detail of the story bears profound physiological and psychological significance. This not only includes the activities of living beings, but also abstract details, including curses and boons, geographical features (such as mountains, caves, and oceans), and constructions (buildings and bridges), as well as a full range of human emotions. Indeed, we will see how every minute part of the *Rāmāyaṇ* displays important characteristics of human physiology and psychology.

As we proceed through the narrative, we will also encounter the display of what might be considered superhuman feats of the *Devatās* and the *Avatārs* (incarnations of the principal *Devatās*). These include the performance of actions from a distance, the transformation of appearance, or flight through the air. Such abilities are known as *Siddhis*, and illustrate fundamental characteristics of Natural Law that express themselves as actions and interactions within the physiology.

The behaviour and relationships of some characters display ideal values. Hanumān, for example, provides a wonderful example in his deep and one-pointed devotion to Rām, which exemplifies the love and devotion for God, for one's spiritual master. Similarly, we see the love and attention between parent and child in the love of King Dasharath for his children, and we observe the devotion between Rām and Sītā. In Sītā's abduction, on the other hand, we encounter sorrow and loss, while qualities of self-sacrifice and perseverance are vividly demonstrated when a great eagle, Jatāyu, followed Sītā and faced his own destruction while trying to save her. The behaviours among the characters also display the variety of influences upon human life,

including planetary influences, the effects of past actions, and the fundamental motivation toward progress and evolution.

The abstract feelings and emotions presented throughout the Rāmāyaṇ also represent the manner in which matter interacts with matter—how our material physiology interacts with itself and reveals the story of its creation. In Chapter I, we will see that matter is consciousness—that everything we see, feel, and experience on the material level is simultaneously taking place within non-material, pure, self-referral consciousness. Thus we find that every individual is Cosmic, containing all the Laws of Nature, the entire Veda and Vedic Literature, all the planets and stars, and all the *Devatās*, and that the story of the Rāmāyaṇ is the story of Natural Law, continually taking place in our own physiology.

In locating any character, relationship, or event from the Rāmāyaṇ within the human physiology, consistency will be our guiding principle. This means that whenever we correlate a character with a part of the body, it must be consistent with all the activities, relationships, stories, and past and future considerations related to that character. All these details must also be consistent with the physiological structures and functions corresponding to other related characters and events in the narrative.

*In Human Physiology: Expression of Veda and the Vedic Literature*, the forty aspects of Veda and the Vedic Literature were located within our physiology. Now we are examining a story involving kings, the incarnations of divinities, the incarnations of negative powers, and the manifestations of various personalities such as animals, demons, etc., who interact in the field of life in the natural evolutionary process of Natural Law. Each of these is an expression of Natural Law in a physical form, and helps tell the story of Natural Law in terms of a drama.

We will begin our investigation in Section I with an overview of the main principles of Maharishi's Vedic Science, so that we can understand the context in which this study takes place. In this we will see how the diverse

universe unfolds from the supreme, unified reality of life, and how each of us grows and evolves to higher states of consciousness. We will then explore the basic systems within the human body, so that the correlations between the Rāmāyaṇ and physiology are rich and meaningful. Chapters III and IV explore the basic fundamentals of the physiology such as space, energy, structure, and function, and how they relate to the six fundamental *Devatās*.

In Section II we begin the comparative study of the Rāmāyaṇ and human physiology, following the narrative as revealed by Vālmīki.

Section III first retraces the path of Rām in the physiology and compares it to his travels throughout India, and then summarizes the salient aspects of the other two main characters of the Rāmāyaṇ: Sītā and Hanumān.

In Section IV, various aspects of characters appearing in other parts of the Vedic Literature, which are somewhat related to the Rāmāyaṇ, are described and correlated with corresponding physiological structures.

While reading this book from beginning to end gives a most complete appreciation of the topic, readers who are familiar with some aspects can certainly proceed directly to the chapters and sections of their interest.

### ***Footnotes***

1. Nader, Tony MD, PhD. *Human Physiology: Expression of Veda and the Vedic Literature*, Maharishi Vedic University Press, Vlodrop, The Netherlands, 1994.



**Section I:**  
**The Foundation of the Rāmāyaṇ**  
**in Human Physiology**

# Chapter I:

## Maharishi's Vedic Science and Technology

Over the last fifty years, His Holiness Maharishi Mahesh Yogi has achieved one of the most remarkable and significant triumphs in human history—the complete restoration of the theory and practice of the many thousands-of-years-old scattered Vedic<sup>1</sup> Literature. In this magnificent accomplishment, Maharishi has organized the Vedic Literature into a complete science of consciousness, and has demonstrated how this ancient wisdom is the most thoroughly modern, thoroughly practical, and fully scientific body of knowledge available in the world today.

In the unfoldment of his Vedic Science and Technology, Maharishi has explained that the Vedic Literature is not a collection of man-made philosophies and myths, nor is it the literary remnants of an ancient culture. Rather, it is the reverberation of the most fundamental level of Nature's functioning, the dynamic structure of an infinite, silent field of intelligence underlying creation. Maharishi describes this field of intelligence—known in the Vedic Language as *Ātmā*—as an ocean of pure consciousness, pure wakefulness, which moves within itself, creating the sounds and sequences of sounds that express themselves as the Laws of Nature governing the universe. These are the sounds that comprise the Vedic Literature.

Maharishi further reveals that there are forty branches of Vedic Literature, each expressing specific qualities of consciousness. These branches—these collections of sounds—are the most fundamental values of Natural Law, at the basis of the infinitely diverse Laws of Nature that create and maintain the vast, ever-expanding universe. And as described in *Human Physiology: Expression of Veda and the Vedic Literature*, these same Laws of Nature have been found on every level of human physiology—in the whole



physiology, the cell, and the DNA at the core of each cell.

Our study of the Rāmāyaṇ, an aspect of the Vedic Literature, is based on this profound understanding, and we will find in the coming chapters that the variety of individuals, relationships, and events of the Rāmāyaṇ are all expressions of Natural Law, the display of the evolutionary processes of the Laws of Nature that take place throughout the universe. These fundamental Laws are also lively at every level of our own life—on the level of thinking, behaviour, and consciousness, as well as within the very fabric, functions, and structures of our own physiology.

The study of the Rāmāyaṇ therefore becomes the study and research in human physiology, revealing the delicate and intricate structures and functions of our physiology and the relationship between its different parts, divisions, and subdivisions. The Rāmāyaṇ also displays the detailed unfoldment of the physiology’s creativity, evolution, and growth. Most significantly, the Rāmāyaṇ discloses how every individual can grow to perfection on the basis of a perfectly balanced physiology, with a nervous system that functions completely normally, without disease or impediment.

Life in perfection is a practical possibility when an individual has fully enlivened his own total intelligence, the most fundamental level of Natural Law, which is the inner Self of everyone—*Ātmā*.

### ***Ātmā*: The Absolute Level of Life**

Maharishi describes the most fundamental level of Nature’s functioning as an unbounded, eternal field of pure intelligence, fully awake within itself, ever self-referral. It is the absolute level of life, at once infinitely silent and infinitely dynamic, administering the entire range of Natural Law. This ocean of wakefulness, of pure intelligence, is known in the Vedic Literature as *Ātmā*, the Self.

Maharishi describes this field as the omnipresent, essential constituent of creation at the basis of everything, the universal source of order and evolution in Nature. Yet it is transcendental, beyond the influence of time, space, or causation, and beyond the influence of relative life. It has no past and no future—it has always been and will ever be, in its timeless, eternal state. It is described in the Vedic Language as *Nitya* (eternal), and *Apaurusheya* (uncreated).

The *Taittirīya Upanishad* describes *Ātmā*, self-referral consciousness, as a field of infinite bliss, the essence of life from which creation flows and evolves. Indeed, bliss is such an integral characteristic of this field of intelligence that its dynamics are described in terms of bliss:

आनन्दाद्धयेद्धद्य खल्विद्धयमानि भूतानि जायन्ते  
आनन्देन जातानि जीवन्ति  
आनन्दं प्रयन्त्यभिसंद्ध्यन्ति

*Ānandāddhyeva khalwimāni bhūtāni jāyante  
ānandena jātāni jīvanti  
ānandaṁ prayanty abhisamvishanti  
(Taittirīya Upanishad 3.6.1)*

*Out of bliss these beings are born,  
in bliss they are sustained,  
and to bliss they go and merge again.*

The significance of this description will become more apparent when we see how *Ātmā* can be unfolded in human life.

## **The Fundamental Level of Nature from the Perspective of Modern Science**

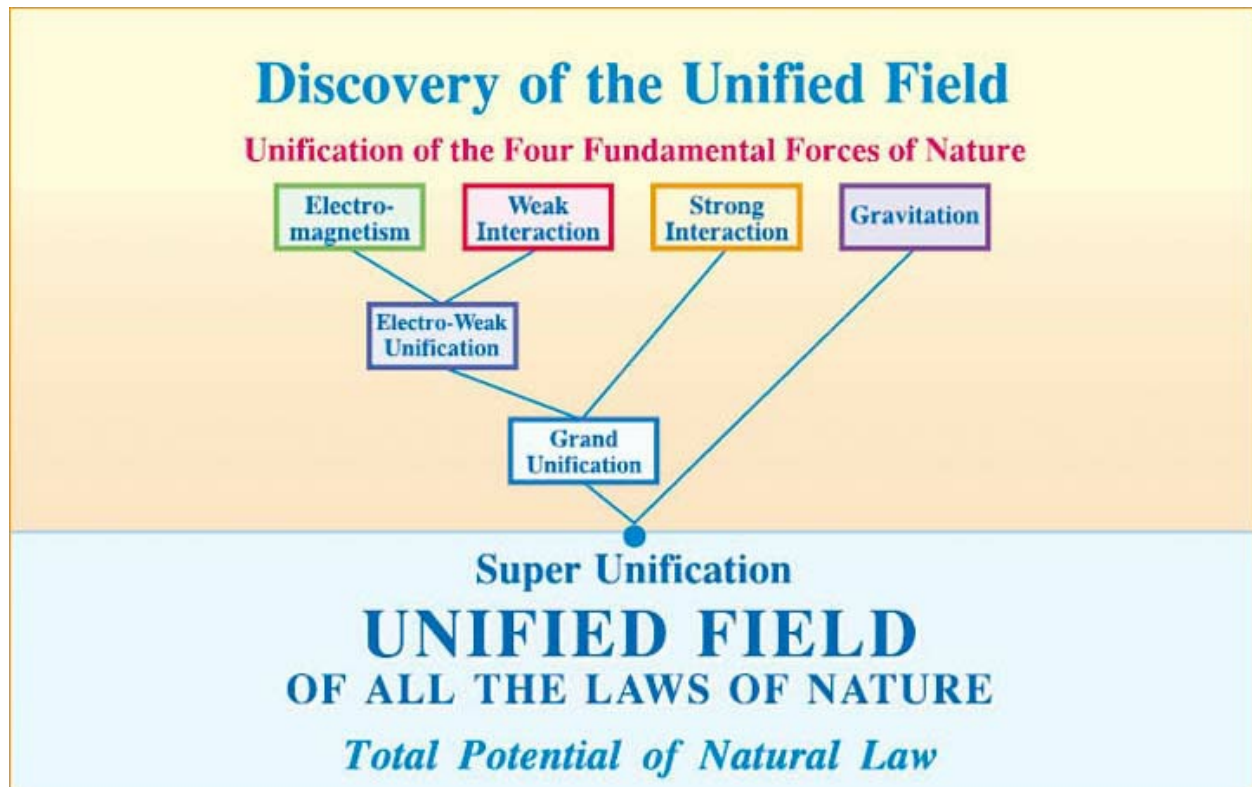
Modern science has also glimpsed a field of unity at the basis of all the Laws

of Nature. In recent decades, modern theoretical physics has revealed progressively deeper layers of order in Nature, culminating in the discovery of the Unified Field of Natural Law as the unified source of all force and matter fields (see [figure 1.1](#)).

The Unified Field is described in the language of modern physics by the Lagrangian of the Superstring, which gives a mathematical formulation of the sequential manifestation of matter from the Unified Field. This Lagrangian describes the detailed structure of the Unified Field in its most compact version, and implicitly contains the mathematical descriptions of more expressed levels of Natural Law. That is, all the Laws of Nature expressed in the effective field theories governing physics at larger distance scales are already contained in seed form in the original supersymmetric Lagrangian of the Unified Field. The Lagrangian of the Unified Field therefore provides a description of the total potential of Natural Law, the most concentrated field of intelligence in Nature, from the perspective of modern physics.

Thus through the objective approach of modern science, physicists have discovered the unified source of Nature's functioning.

However, as Maharishi points out, modern science brings only an intellectual understanding of the functioning of the Laws of Nature, and does not enable the awareness of the scientist to directly experience and utilize in daily life the totality of Natural Law available in the Unified Field.



**Figure 1.1 Unification of the four fundamental forces of nature**

In contrast, as we shall see, the subjective approach of Maharishi's Vedic Science enables any individual to directly experience and live the total potential of Natural Law on a permanent basis, for a problem-free life in fulfilment.

The totality of Natural Law can be enlivened in human awareness because Transcendental Consciousness, *Ātmā*, is itself the Unified Field of Natural Law, and the dynamics of the Unified Field within itself are the self-interacting dynamics of consciousness.

## **The Unified Field Is the Constitution of the Universe**

The self-interacting dynamics of the Unified Field, the most basic level of Nature's functioning, are governed by their own set of laws. Maharishi often refers to these dynamics as the Constitution of the Universe, for they are the source of the Laws of Nature that govern all levels of Nature's activity and uphold the orderly functioning of the universe. A nation's constitution is by definition the most fundamental level of its legal structure, on the basis of which all of its laws derive their authority and authenticity. In the same way, the laws governing the self-interacting dynamics of consciousness are the Constitution of the Universe because they govern all other levels of Natural Law, maintaining order and harmony throughout creation.

In the language of Maharishi's Vedic Science, the Constitution of the Universe is Veda and the Vedic Literature. The eternal dynamism of Natural Law is embodied in the very structure of the sounds of Rk Veda, which are ceaselessly giving rise to and administering the entire creation, and are sequentially expressed in the infinite diversity of the whole material universe.

Since all the diverse Laws of Nature that give rise to and structure the material universe have their source in self-referral consciousness, Maharishi frequently describes this unified level of Natural Law as the 'home of all the Laws of Nature'. We will see the profound implications of this term when we examine how any individual can establish his or her awareness in this home of all the Laws of Nature, and spontaneously utilize the total potential of Natural Law to fulfil all desires and live a mistake-free life in higher states of consciousness.

## **Maharishi's Vedic Science Describes the Sequential Unfoldment of Diversity from the Field of Unity**

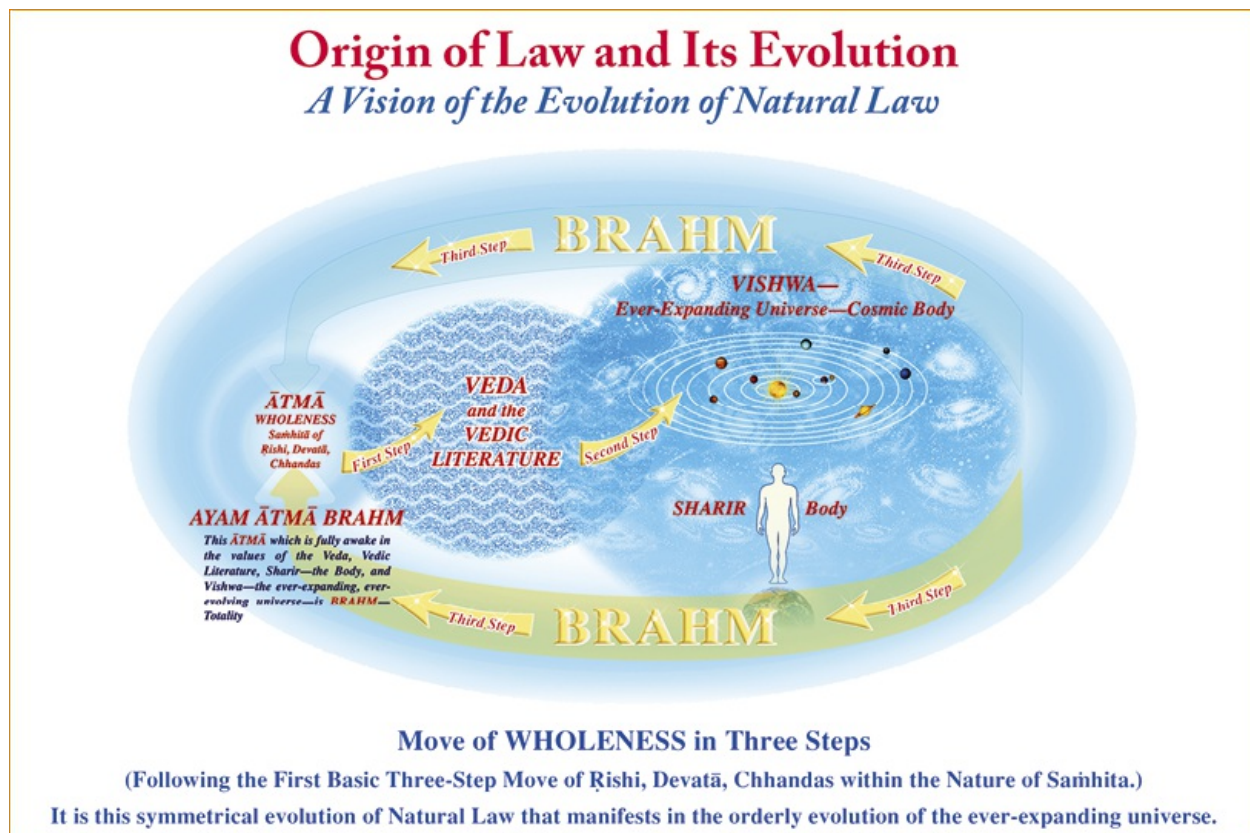
To understand the relationship between the Rāmāyaṇ and human physiology, it is important for us to consider the mechanics through which the purely abstract field of intelligence at the basis of Nature's functioning gives rise to Veda, and how Veda in turn expresses itself as physiology and the material universe. In this context, we will see the Rāmāyaṇ not as a fanciful story invented by an ancient author, but as Nature's own expression, depicting in detail how the physiology functions and how it can be restored to a state of perfect balance.

The following sections examine the details brought to light by Maharishi that reveal how the pure field of intelligence, self-referral consciousness, moves within itself—interacts within itself—to unfold all of the Laws of Nature that create and uphold the universe; how the eternal, silent ocean of consciousness sequentially gives rise to the material universe—how *Ātmā* expresses itself as Veda and how Veda unfolds into *Sharīr* (human physiology) and *Vishwa* (the universe); and how human physiology can realize its total potential in the unfoldment of Totality, *Brahm*.

### **The Self-Interacting Dynamics of Consciousness—The Dynamics of *Ātmā***

*Ātmā* is a field of infinite wakefulness, an ocean of absolute, pure consciousness. Because it is awake, it is awake to itself—awake to its eternal, infinite status of Being. Being awake to itself, it spontaneously recognizes three values within its own nature: the knower, the known, and the process of knowing—subject, object, and that which connects the subject to the object.<sup>2</sup> Being is the knower because it is awake, and it is also the object of knowing because it is awake to itself, observing itself. It is the process of knowing because the knower is knowing itself—there is nothing outside of itself.





**Figure 1.2 The origin of law and its evolution**

Even though *Ātmā* analyses itself in terms of knower, process of knowing, and known, it maintains its unified status as self-referral consciousness, an eternal field of Unity, one singularity of pure intelligence.

In the Vedic Literature, these three qualities of *Ātmā* are known as Rishi, Devatā, and Chhandas: Rishi is the knower, Devatā the process of knowing, and Chhandas the known. Their unified state—the unity of knower, knowing, and known—is the three-in-one structure of pure knowledge called Samhitā.

From the self-interaction of the three qualities of the unity of *Ātmā*, the whole diversity of the universe unfolds.

Since *Ātmā* is a field of pure wakefulness, Rishi, Devatā, and Chhandas must also be awake, and because they are awake, they are awake to each other. Being awake to each other, they interact with each other: when Rishi is

awake to Devatā, it creates a new value of Ṛishi, one that is influenced by the quality of Devatā. Similarly, when Devatā is awake to Chhandas, it creates a new value of Devatā.

When Ṛishi, Devatā, or Chhandas is awake to a different quality of consciousness, a new value is created that is neither of the previous—it is a new quality of intelligence, as if taking on a new shape, form, shade, colour. In this way, new values of Ṛishi, new values of Devatā, and new values of Chhandas emerge from the other, and these increasingly complex interactions lead to the creation of the universe. All these interactions take place on the level of pure wakefulness, *Ātmā*, the basis of this entire field of transformation.

The self-interacting dynamics of *Ātmā* at the basis of the creation of the universe is thus a spontaneous process of consciousness fully knowing itself.

## **Self-Interacting Dynamics of Consciousness as Sounds of the Veda**

Maharishi further points out that the interaction of these qualities of consciousness produces sound, vibration, and in the momentum of self-referral dynamism, Ṛishi, Devatā, and Chhandas continue to create sound from sound, leading to more elaborate, more evolved, more complex forms of sound. Maharishi explains to us that these are not sounds heard through the ears, but are transcendental sounds, Vedic Sounds, within the unmanifest *Ātmā*. They are present within the unmanifest reality of *Ātmā*, and can be appreciated only on their own level, the level of self-referral consciousness. These Vedic Sounds are the dynamics inherent in all the Laws of Nature that give rise to and administer the infinite variety of the vast, material universe.

This self-interacting dynamics of consciousness is called Veda. Veda is not a collection of books, nor is it man-made. Veda is the dynamic interaction of self-referral consciousness within itself, constituting all the unmanifest sounds that result from these interactions. These sounds are called *Shruti*,

which Maharishi describes as ‘vibrancy of intelligence in the form of sound generated by the self-referral dynamics of consciousness—those specific sounds that construct self-referral consciousness, which have been heard by the ancient Seers [*Rishis*] in their own self-referral consciousness and are available to anyone at any time in one’s own self-referral consciousness’.<sup>3</sup> The physical universe emerges from these progressively more expressed values of sound, which, as we will see, are also the essential dynamics that structure the human physiology, itself a perfect replica of Veda.

Maharishi’s analysis of Veda is not philosophical, it is scientific. The empirical basis of Maharishi’s Vedic Science is a technology that enables us to directly experience *Ātmā*, and thus to experience *Shruti* on the unmanifest level as the dynamics of self-referral consciousness. Through Maharishi’s Technology of Consciousness, millions of people throughout the world have experienced this field of pure Being and are becoming increasingly familiar with it. By refining their physiology, they are establishing their awareness permanently in the field of Being, bringing life increasingly into harmony with Natural Law.<sup>4</sup> With a highly purified consciousness and physiology, one can directly experience—one can cognize—the dynamics of Natural Law as unmanifest sounds within one’s own consciousness.

## Vedic Cognition

Maharishi has described the Vedic Sounds as eternal (*Nitya*) and uncreated (*Apaurusheya*). These eternal sounds at the unmanifest basis of creation did not arise at one time and subsequently disappear at another time—they were never created and have always existed, and are eternally omnipresent. Without them nothing can exist, for nothing can be sustained on the physical level without the Laws of Nature.

The Vedic Sounds were cognized by the ancient *Rishis*, or Seers, who experienced *Shruti* as the reverberations of their own self-referral consciousness, their own *Ātmā*. In describing Vedic Cognition, Maharishi explains that the *Rishis* ‘saw the home of all the Laws of Nature, the dwelling

place of all creativity, the seed of creation, in their own reverberating consciousness. The *Ṛishi*, the knower, found himself as the expression of knowledge'.<sup>5</sup> Thus the *Ṛishis* did not cognize the Vedic Sounds as something external to themselves, but rather as the self-referral dynamics of their own consciousness, their own intelligence. The sounds, or hymns, of the Vedic Literature—the sounds of Natural Law—are the *Ṛishis*' experiences of how self-referral consciousness expresses itself into the diversity of creation.

It is important to emphasize that the Vedic Sounds are not the *Ṛishis*' personal creation, but rather their direct experience of the universal dynamic structure and flow of Natural Law. As Maharishi has explained, the *Ṛishis* cognized their own consciousness taking the shape of a wave, and the wave taking the shape of a sound. The wave was seen and the sound was heard, and 'consciousness reverberated in the vibrant value of sound and form simultaneously'.<sup>6</sup>

*Ṛk Veda*<sup>7</sup> reveals this phenomenon in a beautiful expression that lays the foundation for our understanding of Vedic Cognition:

यो जागारु तम् ऋचद्धुः कामयन्ते

*Yo jāgār tam ṛichaḥ kāmāyante*  
(*Ṛk Veda*, 5.54.14)

*He who is awake, the Ṛichā zoom  
forth in his awareness.*

The *Ṛichā* are the verses of *Ṛk Veda*, which express the dynamics that structure all the Laws of Nature. They are experienced spontaneously in a *Ṛishi*'s awareness on the basis of his higher state of consciousness. One is fully *awake* when self-referral consciousness is the permanent reality of one's everyday awareness. Then the *Ṛichā*, the fundamental impulses of Natural Law, are just waves of one's own total wakefulness. Just as an ocean naturally rises in waves, the *Ṛichā* naturally arise in the awareness of those

who are living the total value of their own consciousness.

Vedic Cognition is a profound level of experience, yet every individual is capable of experiencing Veda as reverberations, or *Vṛitti*,<sup>8</sup> of his or her own consciousness, when the awareness settles down and identifies itself with its own inner reality. In this pure wakefulness, the awareness comprehends the details of its own structure and finds that the silent value of its nature coexists with the dynamic value. On this level, the appreciation of the fine mechanics of pure wakefulness is the experience of Veda.

From this analysis, it is clear that the true meaning of Veda is not available through intellectual enquiry, it is realized and enjoyed on the level of direct experience by identifying one's awareness with Veda and exploring it on its own level, within one's self-referral consciousness, one's *Ātmā*. Veda is a field of pure subjectivity, and therefore one can know Veda only by *being* Veda, one can cognize Veda only by *being* Veda. Cognition of the Veda, Maharishi explains, is on its own level, in which the details of pure wakefulness zoom forth in one's awareness.

This reality is expressed in the Vedic Literature:

द्वेदेदाहम् द्वेदोऽहम्

*Vedāham Vedo 'ham*

*I know the Veda, I am the Veda.*

Vedic Cognition is different from hearing the sounds of Veda recited. The Vedic Sounds have been passed down for millennia through the families of the Vedic Paṇḍits of India, thus preserving the sounds and their proper pronunciation, generation after generation. We may hear a Vedic Paṇḍit recite the Vedic Sounds, but it is important to understand that Veda, in its

most profound value, can only be fully realized by allowing our awareness to experience those sounds deep within.

## **Sequential Unfoldment of Veda and the Vedic Literature: Maharishi's *Apaurusheya Bhāshya* of Ṛk Veda**

The sounds of Veda, the dynamic structure and flow of Natural Law, unfold in sequence. Veda emerges from the pure silence of *Ātmā* in a precise, sequential flow of sound and silence—the Vedic Sounds and the gaps between them. As Veda spontaneously unfolds, every stage contains the totality of Natural Law. This means that as each elaborated expression emerges, it embodies the total value of Veda—each progressive unit of sound contains the totality of Natural Law in a progressively more elaborated form.

This progression of sounds and the gaps between them is a perfectly integrated structure of Natural Law, with each sequentially larger unit expressing the same totality of Natural Law in a more expanded version. Maharishi calls this the *Apaurusheya* ('uncreated') *Bhāshya* ('commentary') because it is the commentary of Veda upon itself. This is not a commentary created by human intellect, but is the eternal flow of Veda, in which every sound, every expression, is an elaboration upon what has preceded. Each unit of sound in the sequential unfoldment of sounds is thus a complete structure of total Natural Law, illustrating the formation of Natural Law as it sequentially evolves. Maharishi cognized this commentary of Veda upon itself, and therefore we refer to it as Maharishi's *Apaurusheya Bhāshya*.

Maharishi's *Apaurusheya Bhāshya* describes how this sequential flow always maintains Wholeness, always maintains Saṁhitā of Ṛishi, Devatā, and Chhandas, at every new level of its unfolding. This is how Veda, Total Natural Law, is always available in every expression of Natural Law in the material creation.

Maharishi has given many examples of how the totality of Natural Law is



found in every expression of Veda and the Vedic Literature. The first syllable of Rk Veda, अक् (Ak), comprises two sounds: अ (A), which expresses fullness, and क् (K), the point value of fullness. The two together present the full range of consciousness knowing itself, from its infinite, unbounded value to its own finest point value. अक् (Ak) is thus a concentrated expression of Total Knowledge, Veda.

The next phonetic structure of Rk Veda, the first *Pāda* (phrase), consisting of eight syllables, describes the same total value of knowledge in a more elaborated and detailed form.

Total Knowledge is also displayed in an even more elaborated form in the 24 syllables of the first *Richā* (verse) of Rk Veda.

Total Knowledge is also found in the first *Sūkta* (hymn), in the first *Maṇḍala* (consisting of 192 *Sūkta*), and in the entire 10 *Maṇḍals* of Rk Veda.

The most elaborated value of Total Knowledge is found in the 40 branches of Veda and the Vedic Literature.

This is the structure of Veda unfolding in its totality, from the first syllable, throughout its various levels of elaboration, to the entire Vedic Literature. Every expression of Veda and the Vedic Literature not only reveals a specific value of Natural Law, but also embodies the total reality.

This reality is beautifully described by an expression from the Vedic Literature, which illustrates how Wholeness is found in each stage of the sequential unfoldment of Veda:

पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते  
पूर्णस्य पूर्णमादाय पूर्णमेद्ब्रह्माद्ब्रह्मशिष्यते

*Pūrṇam adaḥ pūrṇam idaṁ pūrṇāt pūrṇam udachyate*

*pūrṇasya pūrṇam ādāya pūrṇam evāvashishyate*  
(*Bṛihad-Āraṇyak Upanishad, 5.1*)

*That is full; this is full; from fullness, fullness comes out;  
taking fullness from fullness, what remains is fullness.*

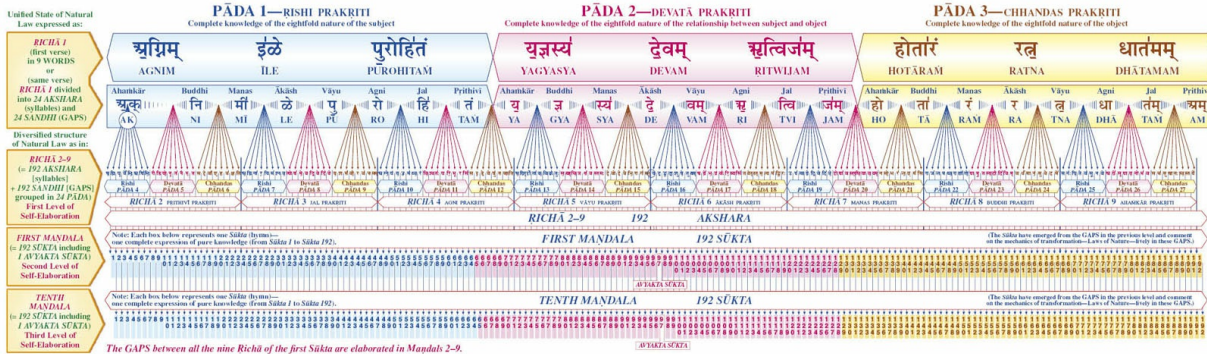
This verse expresses the reality that the sequential unfoldment of Veda always maintains fullness, Totality, as it unfolds into all levels of creation. As fullness expresses itself, fullness remains. The whole creation is one unbounded ocean of consciousness in motion.

### **Total Knowledge of Natural Law Is Contained Not Only in the Sounds of Veda, but Also in the Silent Gaps Between the Sounds**

One of Maharishi's most important contributions to the knowledge of the evolution of Natural Law, as expressed in Veda, is his insight into the structure and mechanics of the gaps between the different sounds of Ṛk Veda. Maharishi explains that Veda not only comprises sound—*Mantra*—but also the gaps between the sounds. In the Vedic Literature these gaps are described as *Brāhmaṇa*.

# MAHARISHI'S COMMENTARY ON RĀ VEDA SAMHITĀ (ĀPAURUSHEYA BHĀSHYA)

Maharishi's Commentary on Rk Veda, *Āpaurusheya Bhāshya*, brings to light the mechanics of evolution of Natural Law. It explains how the WHOLENESS of Natural Law—the unmanifest, eternal ocean of self-referral consciousness—*ĀTMĀ*—gives rise to the sequential, orderly unfolding of specific Laws of Nature.



**Maharishi's Commentary on Rk Veda**

Maharishi's timeless commentary on Rk Veda, *Āpaurusheya Bhāshya*, shows that the structure of the Veda is composed of syllables and GAPS (refer to second line of illustration, *Rikṣi* (verse) 1, split into 24 *Akṣhara*, or syllables, and 24 *Sandhi*, or GAPS). The center of the GAP is the unmanifest point of pure intelligence into which one syllable dissolves and from which the next syllable emerges. In this process of transformation of one syllable into the next is the liveliness of the dynamism of Veda, pure knowledge. In the middle of the GAP is the silent state of Veda, a state of intelligence that is unmanifest and dynamic. This quality of dynamism within the silent state of Veda is called *Ayonyia-Abhaya*, which is the self-referral state of intelligence. *Ayonyia-Abhaya* is the liveliness of the unmanifest state of Veda present within the manifest state of Veda. This unmanifest state of Veda is the abstract structure of Veda; it is that level of intelligence—Creative Intelligence—which is fully awake within itself. It is that self-referral level of intelligence which is the *Sānitā* of Rishi, Devatā, and Chhandas.

**Total Knowledge of Natural Law within the GAP**

Self-referral intelligence is the liveliness of both Unity and diversity. Since this liveliness of self-referral intelligence is the nature of the GAP, it is from the GAP that the total potential of Veda is available. The cognition of this value of the GAP is the cognition of the total potential of Veda—total knowledge of Natural Law lively in its full potential. The sequence of the GAPS between the syllables of *Rikṣi* (verse) 1 (see above illustration of *Rikṣi* 1 split into 24 syllables and 24 GAPS) clearly shows that the structure of Veda is in terms of syllables and GAPS. The sequential unfolding of the structure of Rk Veda, which is orderly and symmetrical, displays the total potential of Natural Law within the structure of Veda and is the source of order and symmetry in the whole universe.

**Significance and Value of the Transformation of One Syllable into Another through the GAP**

So far, whatever commentaries are available on Veda, they are all commenting on the *Akṣhara*, or syllables; the *Shabdā*, or words; the *Pāda*, or phrases; the *Rikṣi*, or verse; the *Sūktā*, or hymns; etc. These commentaries do not bring to light the value and meaning of the GAPS, which actually contain the mechanics of transformation—the *Bṛhmana*—the intelligence that transforms the previous expression into the following.

Creation is a phenomenon of constant transformation. Transformation, or evolution, is the reality of existence. The mechanics of transformation takes place in the unmanifest field; that is why when this field of transformation, within the reality of the GAP, was not brought to light by the commentators, the whole field of pure knowledge and its infinite organizing power remained out of sight; insight into the mechanics of the sequential progression of pure knowledge and the significance of its structuring dynamics remained out of sight; Veda and its utility remained out of sight; Law, Natural Law, and its ordering intelligence remained out of sight; how creation emerges from Veda—how Veda structures itself into *Vishva* (creation)—remained out of sight; the relationship of the unmanifest with the manifest, and how unmanifest consciousness, self-referral consciousness, Transcendental Consciousness, structures itself into the structure of Veda remained out of sight; how Veda is the whole universe remained out of sight; how the *Ātmā*—Transcendental Consciousness—has the whole universe within it remained out of sight; how the part is the whole remained out of sight; how point is infinity remained out of sight; how mortality is essentially immortality remained out of sight; how mortality expresses immortality remained out of sight; how the infinite, unbonded nature of life can become the living reality of daily life remained out of sight. Total potential, freedom, and bliss were lost—ignorance and suffering became real.

**Total Knowledge of Natural Law Available to Everyone**

Now, with the cognition of the reality of the GAPS, all that was out of sight becomes a concrete vision. This is the time when full enlightenment is available to everyone, and now everyone can be, and actually should be, at home with the total potential of Natural Law so that they can enjoy perfection in daily life. With Maharishi's Vedic Science and Technology, the Age of Enlightenment is available to everyone, everywhere. This unique cognition identifies the structuring dynamics of Veda to be the structuring dynamics of consciousness, of the physiology, and of the entire creation. It explains that Total Knowledge (the *Sānitā* of Rishi, Devatā, and Chhandas) and its infinite organizing power are completely contained, expressed, and demonstrated in the sequential unfolding of the structure of Rk Veda. This orderly, sequential unfolding of Rk Veda is available to anyone at any time, intellectually in Maharishi's *Āpaurusheya Bhāshya*, and experientially in one's own Transcendental Consciousness through Maharishi's Transcendental Meditation.

**Constitution of the Universe**

The different levels of elaboration shown in the illustration above give a holistic vision of Nature's total intelligence in Rk Veda, which eternally resides in the unmanifest basis of creation and is continuously giving rise to its own self-elaborating structure of complete knowledge. This structure is the Constitution of the Universe, which ensures flawless administration of the universe and upholds its evolutionary process.

**Inherent Dynamism of ॐ (Āk)—One-Word Expression of Total Veda**

The total range of knowledge and infinite organizing power lively within *Āmā*—the self-referral consciousness of everyone—initially expresses itself in a highly compacted, one-syllable version of total Veda, the single *Akṣhara*, ॐ (Āk), denoting the balanced state of pure wakefulness that has to exist between the opposite values of infinity [∞ (A)] and point [0 (K)], lest they neutralize each other. The inherent dynamics of this seed form of Veda are seen sequentially progressing

into a single straight line of pure knowledge, the first *Rikṣi*, or verse, of Rk Veda, which carries the characteristics of absolute order and thereby serves as a precise index for the entire structure of Rk Veda to arise.

**Four Levels of Self-Elaboration Illustrated Above**

From the 24 *Sandhi* (unmanifest GAPS) of the first *Rikṣi* (verse) emerge the corresponding 24 *Pāda* (phrases) of the next eight *Rikṣi* (2-9), which provide the first level of self-elaboration of Rk Veda. *Rikṣi* 2-9 are a precise commentary on the mechanics of transformation present within the 24 GAPS of the first *Rikṣi*.

The second level of self-elaboration arises from the 192 *Sandhi* (GAPS) between the 192 *Akṣhara* (syllables) of *Rikṣi* 2-9. They give rise to the corresponding 192 *Sūktā* (hymns) of the first *Mandala* of Rk Veda, a circular, cyclical, and eternal structure that comments upon the mechanics of transformation inherent in the 192 GAPS of *Rikṣi* 2-9.

In the third level of self-elaboration, the 192 *Sandhi* (GAPS) between the 192 *Sūktā* (hymns) of the first *Mandala* give rise to the corresponding 192 *Sūktā* of the tenth *Mandala*, which again is a circular, cyclical, and eternal structure that precisely fills the GAPS of the first *Mandala* and serves as a commentary on the mechanics of transformation between the *Sūktā* of the first *Mandala*.

In the fourth level of self-elaboration, the GAPS between all the nine *Rikṣi* of the first *Sūktā* are elaborated in *Mandala* 2-9 of Rk Veda. Now the total Rk Veda with all its ten *Mandala* has unfolded.

It should be noted that the whole structuring dynamics of Rk Veda emerges from one syllable, ॐ (Āk). This shows that Natural Law, which is managing the ever-expanding universe, manages by virtue of its total presence in every grain of creation: in *Ayonyia-Abhaya*, which is lively in the seat of transformation—*Ayonyia-Abhaya* expressed in *Ayonyia-Abhaya*.

**Figure 1.3 Maharishi's commentary on Rk Veda Samhitā. (Double tap on the image to open the zoom-in display. Then use the thumb and index finger starting together and spreading apart from each other to zoom in, and in a 'pinch' manner to zoom out.)**

मन्त्रब्राह्मणायोद्धर्द्येदनामधेयम्

*Mantra Brāhmaṇayor-Veda nāmadheyam*  
(Āpastamba Shrāuta Sūtram, 24.1.31)

*Mantra and Brāhmaṇa together constitute Veda.*

In the flow of the Vedic Sounds, each sound ‘collapses’ into the silent gap, and from the gap a new sound emerges. It is within this silence that the

transformation from one sound to the next takes place. Thus Veda comprises both *Mantra* and *Brāhmaṇa*. One who truly knows Veda knows both *Mantra* and *Brāhmaṇa*.

For example, in the first *Pāda* of Ṛk Veda,<sup>9</sup> each syllable collapses into silence and is transformed into the next syllable: from अक् (Ak) to नि (ni), from नि (ni) to मी (mī), from मी (mī) to ऌ (le) and so on, expressing the sequential dissolution of one sound and the emergence of a new sound. In the gap between each sound, one sound collapses, submerges into silence, and then emerges again as the next sound. Maharishi explains that the centre of the gap, into which each syllable dissolves and from which the next syllable emerges, is unmanifest pure intelligence.

This process of transformation from sound to sound takes place in four stages:

The first stage in the process of transformation, called *Pradhwamsa-Abhāva*, is the collapse, or dissolution, of a sound into the gap.

The second stage is the middle of the gap, *Atyanta-Abhāva*, the silent state of Veda.

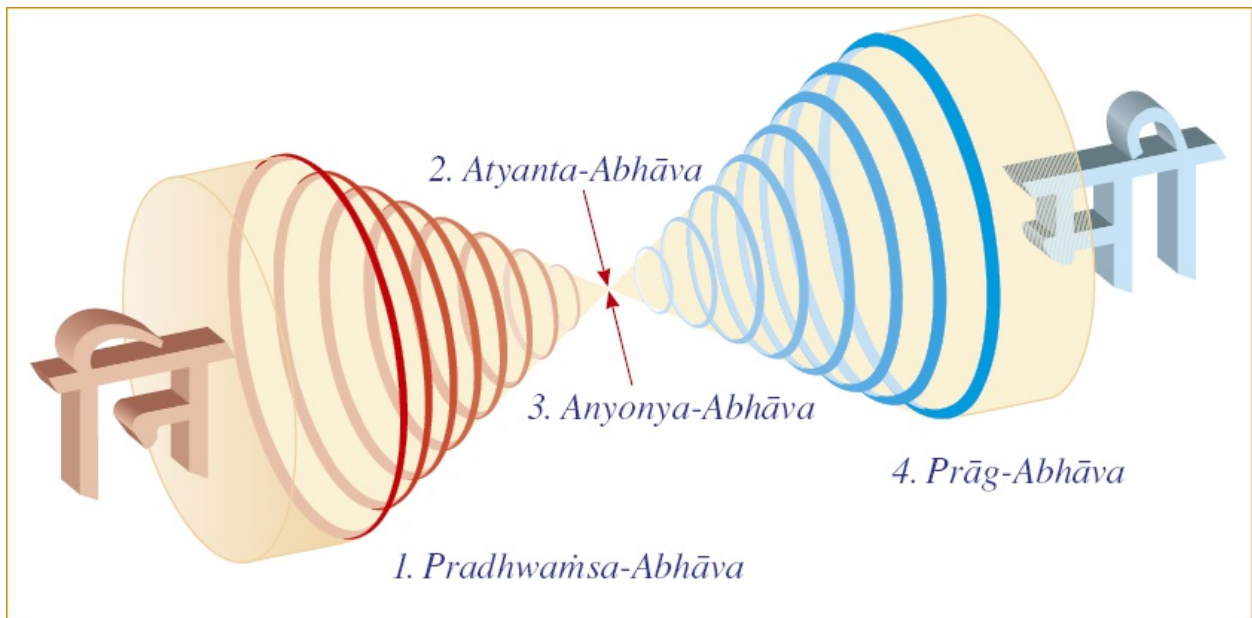
Within the silent state of Veda is the third stage, which is the quality of dynamism called *Anyonya-Abhāva*. *Anyonya-Abhāva* is the unmanifest dynamism of Total Natural Law lively within *Atyanta-Abhāva*. This unmanifest dynamism is the abstract structure of Veda, the level of Creative Intelligence that is fully awake within itself.<sup>10</sup>

The fourth stage is the emergence of the next sound, called *Prāg-Abhāva*. This emergence takes place from within *Atyanta-Abhāva* through the quality of *Anyonya-Abhāva*, which maintains the link between the previous sound and the one that is emerging. This link, which is a fine level of unmanifest memory, maintains the perfect order of Natural Law in the sequential flow of the Vedic Sounds.



The orderly evolution of Natural Law expressed in the whole universe is thus maintained by Total Natural Law as the memory of perfect sequence lively within the silent gap between the sounds of Veda.

Maharishi brings to light that the only commentary on Veda that can do justice to its reality is the commentary of Veda upon itself—*Apaurusheya Bhāshya*. Commentaries have been written on the meanings of the words of Veda, but none has brought to light the Laws that construct these words, which are the structuring dynamics of Natural Law within Veda.



**Figure 1.4** The four stages of the transformation of one Vedic sound into another within the silent gap between them (e.g., between the syllables ni नि and mī मी)

Veda can only be fully known on its own level, it can only be experienced on its own level, and it must be lived on its own level as Total Natural Law. Examining it from the outside—that is, considering it intellectually as a text—can never capture the full value of its reality. Human physiology is able to embody the total reality of Veda because it is Veda, it is made of Veda, and human consciousness can directly experience Veda, be it, and live it. We are Veda. Human life rising to this reality is fully in harmony with Natural Law,

free from mistakes and problems, enjoying complete freedom, achievement, and fulfilment.

## **The Forty Branches of Veda and the Vedic Literature**

We have seen from Maharishi's *Apaurusheya Bhāshya* that the holistic value of the Constitution of the Universe, Total Natural Law, is available in Ṛk Veda. Maharishi points out that 'the structuring dynamics of Ṛk Veda, the laws that structure Ṛk Veda and evolve into the physical material creation, are expressed in all the other areas of the Vedic Literature.'<sup>11</sup>

These branches of the Vedic Literature display the structuring dynamics of consciousness, which promote the sequential unfoldment of Veda, first into the Vedic Sounds (*Shruti*), and from the Vedic Sounds into the material structure of our human physiology (*Sharīr*) and the material structure of the universe (*Vishwa*).

In his analysis of these structuring dynamics, Maharishi has identified a characteristic quality of consciousness associated with each of the 40 branches of Veda and the Vedic Literature.

For example, Ṛk Veda expresses the holistic value of self-referral consciousness, the Holistic quality of intelligence.

Sāma Veda expresses the Flowing Wakefulness quality of intelligence, the sequential flow of silence into the sounds and syllables of Veda. Sāma Veda expresses the dynamism inherent within silence.

Yajur-Veda expresses the Offering and Creating quality of intelligence. The phenomenon of offering at its most fundamental level is the self-referral dynamics of consciousness—consciousness offering itself to itself. This quality of offering is exemplified in the process of *Yajan* (*Yagya*), expressed in Yajur-Veda.



‘Managing Intelligence’ of Nature at the Basis of the Impulses of Consciousness—Structures and				Structures and Functions of the Human Physiology Structuring Dynamics of the Laws of Nature			
their Qualities Qualities of Intelligence	their Names Terminology of Vedic Literature	their Forms Terminology of Modern Physiology		their Qualities Qualities of Intelligence	their Names Terminology of Vedic Literature	their Forms Terminology of Modern Physiology	
1. HOLISTIC/DYNAMIC SILENCE quality of intelligence	fully expressed in → <b>Rk Veda</b> ← which is not expressed in	the Whole Physiology		21. DIFFERENTIATING quality of intelligence	fully expressed in → <b>Bhel Sāmhita</b> ← which is not expressed in	the physiology of the Lymphatic System and Glial Cells	
2. FLOWING/WAKEFULNESS— FLOWING quality of intelligence	fully expressed in → <b>Sāma Veda</b> ← which is not expressed in	the Sensory Systems— the “1000 doorways of perception”		22. EQUIVALENCY quality of intelligence	fully expressed in → <b>Kāshyap Sāmhita</b> ← which is not expressed in	the physiology of the Arterial System	
3. OFFERING and CREATING quality of intelligence	fully expressed in → <b>Yajur-Veda</b> ← which is not expressed in	the physiology of the Processing Systems		23. BALANCING—HOLDING TOGETHER and SUPPORT- ING quality of intelligence	fully expressed in → <b>Charak Sāmhita</b> ← which is not expressed in	the physiology of the Cell Nucleus	
4. REVERBERATING WHOLE- NESS—REVERBERATING quality in every point of HOLISTIC intelligence	fully expressed in → <b>Atharva Veda</b> ← which is not expressed in	the physiology of the Motor Systems		24. SEPARATING quality of intelligence	fully expressed in → <b>Sushrut Sāmhita</b> ← which is not expressed in	the physiology of the Cytoplasm and Cell Organelles	
5. EXPRESSING quality of intelligence	fully expressed in → <b>Shikshā</b> ← which is not expressed in	the physiology of the Autonomic Ganglia		25. COMMUNICATION and ELOCUTION quality of intelligence	fully expressed in → <b>Vāgbhatt Sāmhita</b> ← which is not expressed in	the physiology of the Cytoskeleton and Cell Membrane	
6. TRANSFORMING quality of intelligence	fully expressed in → <b>Kalp</b> ← which is not expressed in	the physiology of the Limbic System		26. DIAGNOSING quality of intelligence	fully expressed in → <b>Mādhav Nidān Sāmhita</b> ← which is not expressed in	the physiology of the Mesodermal Tissues	
7. EXPANDING quality of intelligence	fully expressed in → <b>Vyākaraṇ</b> ← which is not expressed in	the physiology of the Hypothalamus		27. SYNTHESIZING quality of intelligence	fully expressed in → <b>Shārngadhār Sāmhita</b> ← which is not expressed in	the physiology of the Endodermal Tissues	
8. SELF-REFERRAL quality of intelligence	fully expressed in → <b>Nirukt</b> ← which is not expressed in	the physiology of the Pituitary Gland		28. ENLIGHTENING quality of intelligence	fully expressed in → <b>Bhīṣma-Prakāśh Sāmhita</b> ← which is not expressed in	the physiology of the Ectodermal Tissues	
9. MEASURING and QUANTIFYING quality of intelligence	fully expressed in → <b>Chhand</b> ← which is not expressed in	the physiology of the Neurotransmitters, Neurohormones		29. TRANSCENDING quality of intelligence	fully expressed in → <b>Upanishad</b> ← which is not expressed in	the physiology of the Ascending Tracts of the Central Nervous System	
10. ALL-KNOWING quality of intelligence	fully expressed in → <b>Jyotish</b> ← which is not expressed in	the physiology of the Basal Ganglia, Cerebral Cor- tex, Cranial Nerves, Brainstem		30. STIRRING quality of intelligence	fully expressed in → <b>Āraṇyak</b> ← which is not expressed in	the physiology of the Fasciculi Proprii	
11. DISTINGUISHING and DECIDING quality of intelligence	fully expressed in → <b>Nyāya</b> ← which is not expressed in	the physiology of the Thalamus		31. STRUCTURING quality of intelligence	fully expressed in → <b>Brāhmana</b> ← which is not expressed in	the physiology of the Descending Tracts of the Central Nervous System	
12. SPECIFYING quality of intelligence	fully expressed in → <b>Vaisheshik</b> ← which is not expressed in	the physiology of the Cerebellum		32. BLOSSOMING OF TOTALITY quality of intelligence	fully expressed in → <b>Itihās</b> ← which is not expressed in	the physiology of the Voluntary Motor and Sensory Projections	
13. ENUMERATING quality of intelligence	fully expressed in → <b>Sāṅkhya</b> ← which is not expressed in	the physiology of the Cells, Tissues, Organs— Types and Categories		33. ANCIENT and ETERNAL quality of intelligence	fully expressed in → <b>Purāṇ</b> ← which is not expressed in	the physiology of the Great Intermediate Net	
14. UNIFYING quality of intelligence	fully expressed in → <b>Yoga</b> ← which is not expressed in	the physiology of the Association Fibres of the Cerebral Cortex		34. MEMORY quality of intelligence	fully expressed in → <b>Smṛiti</b> ← which is not expressed in	the physiology of the Memory Systems and Reflexes	
15. ANALYSING quality of intelligence	fully expressed in → <b>Karma Mīmāṃsā</b> ← which is not expressed in	the physiology of the Central Nervous System		35. ALL-PERVADING WHOLENESS quality of intelligence	fully expressed in → <b>Rk Veda Prātishākhya</b> ← which is not expressed in	the physiology of the Plexiform Layer—Hori- zontal Communication Cerebral Cortex Layer 1	
16. LIVELY ABSOLUTE (LIVING WHOLENESS—INNESS or BEING) quality of intelligence	fully expressed in → <b>Vedānt</b> ← which is not expressed in	the physiology of the Integrated Functioning of the Central Nervous System		36. SILENCING, SHARING, and SPREADING quality of intelligence	fully expressed in → <b>Shukl-Yajur-Veda Prātishākhya</b> ← which is not expressed in	the physiology of the Corticocortical Fibres Cerebral Cortex Layer 2	
17. INTEGRATING and HARMONIZING quality of intelligence	fully expressed in → <b>Gandharva Veda</b> ← which is not expressed in	the physiology of the Cycles and Rhythms, Pacemaker Cells		37. UNFOLDING quality of intelligence	fully expressed in → <b>Atharva Veda Prātishākhya</b> ← which is not expressed in	the physiology of the Corticospinal, tectal, spinal Fibres Cerebral Cortex Layer 3	
18. INVINCIBLE and PROGRESSIVE quality of intelligence	fully expressed in → <b>Dhanur-Veda</b> ← which is not expressed in	the physiology of the Immune System, Biochemistry		38. DISSOLVING quality of intelligence	fully expressed in → <b>Atharva Veda Prātishākhya (Chaturadhyāyī)</b> ← which is not expressed in	the physiology of the Corticocortical and Corticospinal Fibres Cerebral Cortex Layer 4	
19. ESTABLISHING quality of intelligence	fully expressed in → <b>Śhāpatya Veda</b> ← which is not expressed in	the physiology of the Anatomy		39. OMNIPRESENT quality of intelligence	fully expressed in → <b>Krishṇ-Yajur-Veda Prātishākhya (Taittirīya)</b> ← which is not expressed in	the physiology of the Commissural and Corticocortical Fibres Cerebral Cortex Layer 5	
20. NOURISHING quality of intelligence	fully expressed in → <b>Hārita Sāmhita</b> ← which is not expressed in	the physiology of the Venous and Biliary Systems		40. UNMANIFESTING THE PARTS BUT MANIFESTING THE WHOLE quality of intelligence	fully expressed in → <b>Sāma Veda Prātishākhya (Pushpa Sūtram)</b> ← which is not expressed in	the physiology of the Thalamocortical Fibres Cerebral Cortex Layer 6	

**Figure 1.5 The 40 branches of Veda and the Vedic Literature and their corresponding aspects in human physiology. (Double click to enter zoom mode.)**

Atharva Veda expresses Reverberating Wholeness, which Maharishi describes as the reverberation (*Tharva*) of Wholeness (‘A’), the reverberations of the Self (*Ātmā*), the unmanifest sounds emerging from the self-interacting dynamics of WHOLENESS.

In the same way, each of the remaining 36 branches of the Vedic Literature is associated with a specific quality of consciousness, identifying its function in the structuring dynamics of pure intelligence.

## Human Physiology Is the Expression of Veda and the Vedic Literature

In the sequential unfoldment of Natural Law, Veda expresses itself as vibration, and then as material form and human physiology (*Sharīr*). In this process, it is the self-referral dynamics of consciousness that create continuously more evolved forms of sound, until the entire universe has emerged from the Vedic Sounds.

Human physiology is an expression of Vedic Sound—Veda and the Vedic Literature are the essential constituents of the structures and functions of human physiology. In *Human Physiology: Expression of Veda and the Vedic Literature*, we examined human physiology in great detail, and demonstrated the one-to-one relationship between the different parts of the physiology and the different aspects of the Vedic Literature. The structure of each branch of the Vedic Literature corresponds perfectly with the structure of a specific aspect of the physiology.

This research also demonstrated that the Vedic *Devatās*, which are the principles of Natural Law that organize and administer every part of creation and maintain it in perfect order, are also found in human physiology. The Vedic *Devatās* are therefore not religious symbols nor human mythological creations, but are, as Maharishi points out, the Laws of Nature, or collections of Laws of Nature, that administer the universe, our lives, and our own physiology.<sup>12</sup>

This discovery points to a revolutionary and comprehensive understanding of Veda and the Vedic Literature, for it reveals that the stories about the *Devatās*—including Shiva, Vishṇu, Brahmā, Saraswatī, Lakshmī, and Durgā, as well as their incarnations as Kṛishṇa, Rām, Buddha, etc.—are not myths or legends, nor even the accounts of divine beings observing us from afar; they are the descriptions of the exact function and structure of Laws of Nature that are present everywhere in every point of creation.

These Laws are essential to the smooth functioning of every level of life, from the molecular and subatomic levels, to the vast galaxies, to human physiology.

We noted previously that the totality of Natural Law is contained at every step of the sequential unfoldment of Natural Law. Therefore when we examine the *Devatās* in human physiology, we find that each *Devatā* can be located at every stage of the physiology's unfoldment.<sup>13</sup>

This principle of the whole being contained within every part can also be applied in describing the relationship between man and the entire cosmos. In the immortal words of the Vedic Literature:

यथा पिण्डे तथा ब्रह्माण्डे

*Yathā piṇḍe tathā Brahmāṇḍe*

*As is the atom so is the universe;  
as is the body, so is the Cosmic Body.*

This expression illustrates the cosmic dimension of every individual by affirming that the same Laws of Nature responsible for the entire universe are also located in the human body. As we have seen, total Veda is not only found in each Vedic Sound, but also within every grain of the entire universe. The physiology, therefore, is a microcosm of the universe—the sun, moon, planets, stars, and galaxies are all found in every level of our physiology, including our cells and the DNA within the cells.

We will see in the next section how any individual can unfold his or her Cosmic Potential by awakening the totality of Natural Law, which is present within our own consciousness, mind, intellect, and within our own physiology.

## **Unfolding Our Cosmic Potential**

The ability to live in harmony with total Natural Law, which governs the whole of cosmic life, is developed simply by fully enlivening the field of pure consciousness, *Ātmā*, in our awareness.

*Ātmā*, we have seen, is the most basic reality of life. It is not only the basis of the physical universe, but also the most fundamental level of human awareness—the source of human thought, human intelligence, human creativity, and the basis of every thought and action.

The Nṛisimhottaratāpanīya Upanishad reveals that *Ātmā* is available to human experience as a state of unity and peace, the fourth state of consciousness, separate from waking, dreaming, and sleeping:

शिद्धं शान्तमद्वैतं चतुर्थं मन्यन्ते स आत्मा स द्विद्यज्ञेयः

*Shivam shāntam adwaitam chaturtham manyante  
sa Ātmā sa vigyeyaḥ  
(Nṛisimhottaratāpanīya Upanishad, 1)*

*The peaceful, the blissful, the undivided is thought to be the fourth; that is the Self, that is to be known.*

The ancient *Rishis* of the Vedic Tradition described how every individual can directly experience *Ātmā* as the simplest form of awareness, when the mind settles to its quietest, least-excited state, and identifies itself with this eternal field of self-referral consciousness. Maharishi has brought to light technologies from the Vedic Tradition that enable any individual to directly experience *Ātmā*, and to unfold it fully in their awareness. These technologies include Maharishi's Transcendental Meditation programme as well as its advanced TM-Sidhi programme with Yogic Flying.

## **Maharishi's Transcendental Meditation and TM-Sidhi Programme**

Maharishi's Transcendental Meditation programme is a simple, natural, effortless procedure whereby the mind easily and naturally experiences its own simplest, most peaceful, and wakeful state, *Ātmā*. This process can be likened to a river naturally and effortlessly flowing into the ocean, thereby gaining the status of the ocean.

Maharishi has also made his TM-Sidhi programme, an advanced aspect of Transcendental Meditation, available to the world. The TM-Sidhi programme trains an individual to think and act from the level of Transcendental Consciousness, *Ātmā*. Learning to function from this most powerful level of human awareness enhances the coordination between mind and body, and spontaneously develops our ability to enliven Natural Law to support the fulfilment of desires in all avenues of life.

The TM-Sidhi programme thus accelerates individual evolution, while simultaneously creating a powerful, harmonizing influence in collective consciousness that provides the basis for the development of an ideal society.

More than 600 scientific studies, conducted at 250 research institutes in over 30 countries, demonstrate that the Transcendental Meditation and TM-Sidhi programme produces profound benefits for mind, body, behaviour, and the establishment of peace and harmony in the environment. A most significant finding is that a large group of individuals practising Maharishi's TM-Sidhi programme, including Yogic Flying, creates an influence of order and coherence in collective consciousness, eliminating collective stress and raising life to be increasingly in accord with Natural Law. This phenomenon, known as the *Maharishi Effect*, is measured by improved positive trends and decreased negative trends in society.

The regular practice of Maharishi's Transcendental Meditation and TM-Sidhi

programme, along with other technologies of Maharishi's Vedic Science, enables any individual to unfold the totality of Nature's intelligence within himself or herself. In this state of enlightenment one lives the total potential of human life, in which total fulfilment, total integration, total support from Natural Law predominate. The state of enlightenment has its physiological basis in the complete development of the brain and all aspects of the human nervous system. It is characterized by the awakening of total Veda within the human body, and, as we will see, the complete awakening of the Rāmāyaṇ within human physiology.

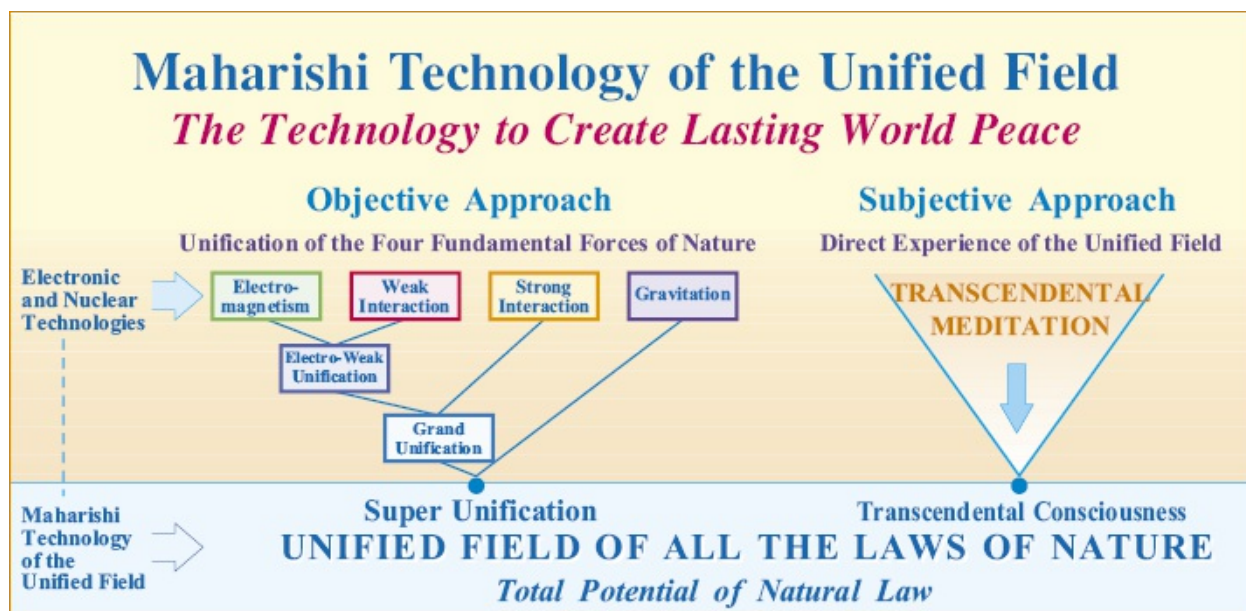
## **Maharishi's Vision of Seven States of Consciousness**

Maharishi has described in detail the mechanics of the growth of higher states of consciousness. He explains that there are seven states of consciousness, including three relative states with which we are already familiar—waking (*Jagrat Avasthā* or *Jagrat Chetanā* in the Vedic language), dreaming (*Swapna Avasthā* or *Swapna Chetanā*), and sleeping (*Sushupti Avasthā* or *Sushupti Chetanā*)—and four higher states of consciousness, which we will now describe.

### **Transcendental Consciousness— The Fourth State of Consciousness**

Transcendental Consciousness is experienced during Transcendental Meditation, when the mind settles down to experience only *Ātmā*, the Self, the fourth state of consciousness, known as *Turīyā Avasthā* or *Turīya Chetanā*. Maharishi describes Transcendental Consciousness as 'wholeness, aware of itself, devoid of differences, beyond the division of subject and object'.





**Figure 1.6 Maharishi Technology of the Unified Field**

### Cosmic Consciousness— The Fifth State of Consciousness

By alternating the regular experience of Transcendental Consciousness, the Self, with normal day-to-day activity, one begins to culture the ability to maintain pure consciousness even while experiencing the outside, changing world—one remains engaged in the experiences of the outer world without losing the infinite, unbounded, bliss consciousness that was previously only experienced within. Experiencing inner silence and outer activity together, one enjoys a state of perfect liberation, because the experience of boundaries no longer shadows the experience of unboundedness. This experience of the Self along with activity is not only found in the waking state, but also during dreaming and deep sleep.

Maharishi calls this state Cosmic Consciousness, also referring to it by its Vedic names, *Turīyātīta Avasthā* and *Turīyātīta Chetanā*.

In the early days of the practice of Transcendental Meditation, the nervous system may not be able to maintain the physiological functioning of

Transcendental Consciousness along with activity because it contains stresses and strains. We will see that these stresses and strains are also found in the Rāmāyaṇ in the form of *Rākshasas* (demons). *Rākshasas* correspond to anomalies in the nervous system that can be eliminated by the experience of Wholeness, the experience of Transcendental Consciousness or *Ātmā*, which one gains during Transcendental Meditation. In the Rāmāyaṇ this process corresponds to the growth of Rām within the physiology.

## God Consciousness

As Cosmic Consciousness becomes established, one begins to perceive finer and finer values of Nature's intelligence in every object, and one begins to perceive beyond the surface value of an object to its infinitely harmonious and glorified nature. Maharishi explains that as we grow in appreciation for creation, we are really growing in appreciation for the Creator. Just as one comes to know an artist by gaining increasing familiarity with his paintings, one learns the reality of the Creator by appreciating creation on its most profound level. For this reason, Maharishi refers to the sixth state of consciousness, in which one perceives the finest, celestial value of objective phenomena, as God Consciousness, or *Bhagavat Chetanā*.

Maharishi further comments that in God Consciousness the heart, in its eternal state of contentment, '...begins to draw everything together and eliminate the gulf of separation between the Self and activity. The Union of all diversity in the Self begins to grow. The intensity of this Union cultures man's consciousness, which begins to find everything inseparable from the Self; and this is how, in the most natural manner, the Self, which held Its identity as separate from all activity in the state of Cosmic Consciousness, finds everything in Itself.'<sup>14</sup> This is the dawning of Unity Consciousness.

## Unity Consciousness

Unity Consciousness thus unfolds on the basis of the profound experience of the love and devotion of God Consciousness. With the full blossoming of the

heart and intellect, the unifying value of love and devotion cultures the experience of the unity of all life, and one begins to perceive the unity underlying diversity.

Ultimately, one begins to recognize that every object of perception is just an expression of one's own infinite Self. In Unity Consciousness, the Self that was experienced in Cosmic Consciousness as separate from the objects of perception suddenly zooms forth and is perceived on the surface level of life, in every object of experience. This is the characteristic of Unity Consciousness, or *Brahmī Sthiti*, *Brahmī Chetanā*.

Unity Consciousness is the ultimate level of human evolution, in which one experiences that the essential nature of an object of perception is nothing other than one's own self-referral consciousness; the experiencer and the object of experience have both been raised to the infinite level. The gulf between the knower and the object of knowing has thus been bridged, and all perception can be called supreme. In this state, one has gained the total value of knowledge, complete knowledge.

This is the great, grand culmination of human evolution, where an individual lives and breathes Totality, *Brahm*. The Vedic Literature provides many beautiful descriptions of the the complete unfoldment of Unity Consciousness:

अहं ब्रह्मास्मि

*Aham Brahmasmi*  
(*Bṛihad-Āraṇyak Upanishad, 1.4.10*)

*I am Totality.*

तत्त्वमसि

*Tat Twam Asi*  
(*Chhāndogya Upanishad, 6.11*)

*Thou Art That.*

सद्वर्घं खलु इदं ब्रह्म

*Sarvaṁ Khalu Idam Brahm*  
(*Chhāndogya Upanishad, 3.14.1*)

*All This is Totality.*

Rishi Vasishtha, whom we will encounter in our discussions of the Rāmāyaṇ, beautifully described the experience of *Brahm* in the following expression from Ṛk Veda:

दूरेदृशं गृहपद्वद्वतिमथर्युम्

*Dūre-dṛisham grihapatim atharyum*  
(*Ṛk Veda, 7.1.1*)

*Far in the distance is seen the owner of the house, reverberating.*

This is a declaration that you can go as far as you want to go—you can go into the unbounded, unlimited range of pure wakefulness, and then, in the words of Vasishtha, ‘I have seen at the other end the same thing that is here within me’. This is the reality of Unity Consciousness, which Maharishi has described and given us the technologies to achieve.

The story of the Rāmāyaṇ is the story of the development of the human physiology as it evolves to higher states of consciousness. We will see how the physiology, with all its structures and functions, develops such integration and purity that it naturally supports the total awakening of consciousness as Wholeness, *Brahm*.

## **Higher States of Consciousness Bring Life into Accord with Natural Law**

One of the vital challenges in every society is to culture proper behaviour in all citizens, so that they never harm others and never create problems in the environment, while always progressing and achieving success. This topic is of great consequence to every area of national life, but especially to the field of education, for it is the educational systems of the world that are responsible for structuring the growth and development of our children and every future generation.

It is clear that the answer is not available in the prevailing knowledge of psychology or sociology, as is evident from the state of the world today. A comprehensive, practical solution requires a profound insight into Natural Law and its application to human life.

We have seen that Natural Law handles everything in creation—every object and every activity has been generated within the field of self-referral consciousness, which administers the universe with perfect orderliness, perfect silence, and flawless precision. Natural Law governs everything that we are able to observe, but also countless entities and activities that are outside the range of our experience. Even our own body includes both familiar functions and many that are outside common understanding. On the basis of limited understanding and experience of Natural Law, it is not possible to determine intellectually how to act properly—that is, to never violate Natural Law.

How can we learn to act in accord with Natural Law? How can we train

ourselves to not make mistakes, nor to harm others or our environment?

Maharishi explains that we have Totality—the total potential of Natural Law—available to us within our own consciousness and within our own physiology. With the understanding of the development of higher states of consciousness, we see how Totality unfolds, how it expresses itself, and how it can be realized in our awareness. With Total Natural Law enlivened in consciousness, we become a master of the complex interplay of the Laws of Nature governing the vast diversity of human behaviour.

We have seen that the total potential of Natural Law is available in Veda and Vedic Literature, which expresses itself as the human physiology. The total potential of all the Laws of Nature is the pure intelligence located at the basis of creation, endowed with all knowledge ranging from point to infinity. Everything is conducted by Natural Law, and everything moves through its course of evolution governed by Natural Law. The very purpose of Natural Law is to evolve life to perfection, and even though every individual law has its own specific range of performance and activity, each functions to evolve life towards more and more.

Maharishi has given us the knowledge and technology through which we can align ourselves with this evolutionary direction of Natural Law. When we contact *Ātmā*, the Unified Field of Natural Law, during the practice of Transcendental Meditation, we begin to culture the nervous system so that it can increasingly sustain the total potential of Natural Law in the awareness. In doing so, we imbibe the most fundamental level of Nature's functioning in our awareness. Over time we become more and more the embodiment of Natural Law, increasingly capable of spontaneously acting in accordance with all the Laws of Nature. Every thought and act becomes a spontaneous expression of Nature's organizing power, its impact and consequence automatically computed and organized by Total Natural Law itself.

Maharishi cites a verse from R̥k Veda to illustrate the principle of how the total potential of Natural Law can become anyone's 'charioteer'—the guiding

force of life bestowing the spontaneous ability to perform action in accord with all the Laws of Nature:

यतीनद्धत्वां ब्रह्मा भद्धद्धद्यति सारद्धद्धथि

*Yatīnāṁ Brahmā bhavati sārathiḥ*  
(*Rk Veda*, 1.158.6)

*For those who are established in the singularity of fully awake self-referral consciousness, Brahmā, the Creator—the infinite organizing power of Natural Law—becomes the charioteer of all activity.*

One who is established in this reality has the infinite organizing power of Natural Law as the charioteer of every action—for those who are established in fully awake self-referral consciousness, the absolute administrator of the universe, Totality, Rām, becomes their guide.

This is the theme of the Rāmāyaṇ. In the following chapters, we will see how Rām, as Total Natural Law, comes to administer our physiology in gradual steps of growth and evolution, until the whole field of the physiology is in harmony with Natural Law—Rām is fully expressed in every aspect of physiology.

We will see by the end of this study how Unity is expressed in the Rāmāyaṇ, how oneness comes to be lived, resulting in a life in bliss, life in harmony with Rām—in harmony with *Brahm*. In the Rāmāyaṇ, it is the citizens of Ayodhyā (Rām’s kingdom)—who correspond to the organs and structures of the physiology as well as to all aspects of mind, intellect, and ego—who gain this state of life.

This is the supreme destiny of every individual—to fully own the home of all the Laws of Nature, and to become a master of one’s destiny, capable of fulfilling any desire, of accomplishing any deed, and of living in complete bliss and harmony with Natural Law. Maharishi’s Transcendental Meditation



and TM-Sidhi programme, and all the technologies that Maharishi brought to light from the Vedic Tradition, provide the opportunity for every one of us to unfold the total potential of our Self, *Ātmā*, so that every aspect of life can be lived in fullness, in perfection, with the ability to know anything, do anything, and accomplish anything.

All these benefits arise ultimately from the knowledge and experience of total Natural Law, *Ātmā*, and for this reason the Bṛihad-Araṇyak Upanishad proclaims

आत्मा द्वेद्या अरे द्रष्टव्यः श्रोतव्यः  
मन्तव्यः निदिध्यासितव्यः

*Ātmā vā are drashtavyaḥ shrotavyaḥ  
mantavyaḥ nididhyāsitaḥ  
(Bṛihad-Āraṇyak Upanishad, 2.4.5)*

*That Ātmā alone, that state of simplest form of awareness alone, is worthy of seeing, hearing, contemplating, and realizing.*

## **Experiencing the Flow of Total Natural Law Through the Sounds of Veda and the Vedic Literature**

Maharishi brought to light that in order to train our physiology to always function in the same sequential flow of Natural Law from which it was ultimately structured—the flow of Veda and the Vedic Literature—one should experience the sounds of the Veda. If we are exposed to these sounds when we are growing, they will help mould our physiology in a more positive and powerful direction, according to their own organizing intelligence. At any time of life it is very important to listen to these sounds, which can restore balance to the physiology, and even help cure disease. As we will see in the course of our study of the Rāmāyaṇ, the sounds of Veda and the Vedic Literature are the ultimate weapons used to restore order—that is, to restore the whole physiology to its normal state and bring it into alignment with total Natural Law.

During our practice of Maharishi's Transcendental Meditation and TM-Sidhi programmes we experience *Ātmā* directly, and then, as Maharishi recommended, we listen to the Vedic Sounds to experience *Ātmā* in its vibrational values. This provides a highly effective way to train the nervous system to function in accord with the sequence of Natural Law, so that every thought, word, and action is always in accord with Natural Law, always in accord with Nature's design.

Maharishi also brought to light other technologies from Vedic Science to help enliven Total Natural Law in the physiology. For example, living and working in buildings created according to the timeless principles of Maharishi Sthāpatya Veda enables us to live in harmony with the rhythms of planetary movement and with all the rhythms of Nature, to enjoy good health, happiness, and good fortune. Maharishi also emphasized that by upholding the most healthy daily and seasonal routines in accord with the cycles of

nature, and by eating the purest and most appropriate food, we culture our mind and body to be in accord with Natural Law.

## Summary

This is a very brief introduction to Maharishi's Vedic Science, including a vision of the evolution of Natural Law: how pure, unbounded self-referral consciousness expresses itself as Veda; how Veda expresses itself as our physiology, *Sharīr*, and as the entire universe, *Vishwa*; and how by taking advantage of Vedic Technologies, the human nervous system can be raised to a level on which individual life breathes Cosmic Life. This understanding is the foundation for appreciating the Rāmāyaṇ as the story of human physiology. We will see how the entire physiology, with all its organs and organ systems, corresponds to the different characters, situations, and events of the Rāmāyaṇ.

We will consider in great detail the beautiful achievement of Rām's kingdom of Ayodhyā, where he ruled in perfection—where the silence and dynamism of Total Natural Law permeated all aspects of individual life and society. We will see how life on Earth today can similarly be raised to a heavenly status, through the full development of our physiology and consciousness, and the development of collective consciousness. This is the blessing of His Holiness Maharishi Mahesh Yogi with the grace of Guru Dev and the Holy Tradition of Vedic Masters.

## Footnotes

1. 'Vedic' means 'pertaining to Veda', to knowledge in its supreme value, as explained in the following pages.
2. As an example, let us analyse what is involved when you see an apple. You have first the observer, which is yourself; second, there is the observed, which is the apple; and third, there is the process of observation, which involves the eyes, the brain, etc., leading to the recognition that you are looking at

an apple and not a flower. The observer is the knower, the observed is the object known, and the process of observation is the process of knowing. The same thing happens within the nature of pure awareness, *Ātmā*. The key difference is that *Ātmā* is pure awareness alone—there is nothing outside of *Ātmā* to observe—and therefore *Ātmā* itself is the knower, the known, and the process of knowing.

3. Maharishi Mahesh Yogi. (1993). *Maharishi's Absolute Theory of Government: Automation in administration*, Holland: Maharishi Vedic University Press, p. 352.

4. Please refer to a later section of this chapter, entitled '[Maharishi's Transcendental Meditation and TM-Sidhi Programme](#)' for a description of scientifically validated benefits.

5. Maharishi Mahesh Yogi. (1974a). *The phenomenon of cognition: Experiencing the mechanics of creation and the source of knowledge* [Vedic Studies Core Course Syllabus, 18 February, 1974, Interlaken, Switzerland].

6. Ibid.

7. Ṛk Veda is the first of the 40 branches of Veda and the Vedic Literature, and expresses the totality of Natural Law in its most concentrated form. Maharishi has described Ṛk Veda as expressing the holistic (dynamic silence) quality of consciousness.

8. In English, most nouns form their plural by adding a final 's', but this is not the case in Sanskrit. In order to maintain the integrity of the Sanskrit sounds, therefore, we have in most cases not added the English 's' to indicate the plural of a Sanskrit noun. Although this means that the singular and plural forms often appear identical, the distinction should be clear from the context. In a few cases (such as *Ṛishis*, *Devatās*, and *Rākshasas*), we have included a final 's' to avoid confusion.

9. अग्निमीद्वद्धळे पुरोहिद्वद्धतं यज्ञस्यद्वद्ध देवद्यमृत्विद्यजद्वद्धम् होताद्वद्धरं रत्नधातद्वद्धमम्  
*Akṇimīḷe purohitam yagyasya devam ṛitwijam hotāram ratnadhātamam*

10. See [figure 1.4](#).

11. *Maharishi's Absolute Theory of Government*, pp. 164–165.

12. Please see pages 333–419 in *Human Physiology: Expression of Veda and Vedic Literature*.

13. For example, we may find Shiva expressed as the gaps within the physiology, but also as the whole

human brain. Different analyses focus on different stages of the physiology's development, and are thus not contradictory.

14. Maharishi Mahesh Yogi. (1969). *Maharishi Mahesh Yogi on the Bhagavad Gītā: A new translation and commentary*, Chapters 1–6. Baltimore, Penguin, p. 307.



## Chapter II

# Introduction to Human Physiology

**M**ore than 200 years of scientific research have revealed the structure and function of the human physiology. In this chapter we will briefly examine several of the most fundamental levels of the body's organization, which will provide a basis for understanding the relationship between the different organs and systems in the physiology and the characters and events of the Rāmāyaṇ.

As we saw in Chapter I, every aspect of the universe is an expression of the Unified Field of all the Laws of Nature, which in the Vedic Language is called *Ātmā*, the Self, pure Being. The stars, planets, galaxies, and the near and far environment all emerge from the self-interacting dynamics of the Unified Field. The human physiology is the most supreme material expression of the Unified Field, capable of reflecting the Totality of *Brahm*, the infinite, eternal reality of life. Veda is the structuring dynamics of human physiology. The Upanishads proclaim this eternal principle, stating:

अणोरणीयान् महतो महीयान्

*Aṇoraṇīyān Mahato Mahīyān*  
(*Katha Upanishad, 1.2.20*)

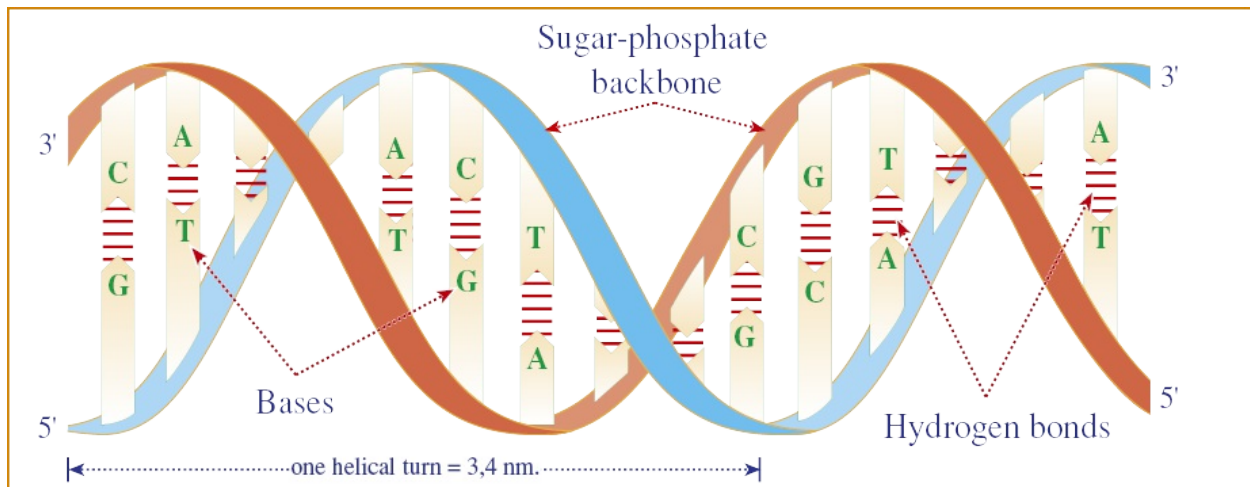
*(The Self is) finer than the finest, bigger  
than the biggest*

### The DNA Molecule: The Inner Intelligence of Life

Veda is expressed on different levels of manifestation within the physiology. On the most profound level it is seen in DNA, which expresses the body's inner intelligence. Physically, it is a long, double helix (DNA) molecule in



the central nucleus of virtually every cell, which organizes all of the cell's structures and functions. It also organizes the relationships between one cell and another, and the relationship between the body and the environment, taking into account the cycles and rhythms of Nature, including the cycles of human development from birth to old age.



**Figure 2.1 The Double Helix of the DNA**

The intelligence within DNA creates the physiology by guiding the development of a single cell into many cells, which sequentially organize themselves into tissues, organs, and organ systems, eventually forming the vast, complex structure that we know as the human body.

The DNA molecule, like other molecules, is made out of atoms. These atoms are organized in such a way as to allow DNA to store a great deal of information by forming units (codons) within DNA that act as letters of the genetic alphabet.

In any language, the sequence of letters or syllables in a word determines its unique meaning. DNA also has its own language, determined by the genetic code, the sequence of atoms and molecules within it. The words of this genetic language have specific meanings that are used to create other molecules called proteins, which can act as enzymes to control all the

biochemical functions of the cell and body. Therefore the DNA molecule, sitting in the centre or nucleus of the cell, can intelligently direct all of the cell's activities by producing these enzymes.

## **The Biochemistry of Life and the Physics of the Unified Field**

As we explore the levels of DNA in the physiology, we can see that the study of physiology includes within it the study of biochemistry, the chemistry of life. The field of biochemistry is huge and includes a detailed analysis of all the chemical reactions in the body, which primarily involve organic rather than inorganic molecules.

Organic molecules are distinguished from inorganic molecules by the presence of carbon and hydrogen atoms linked together within them. For example, the DNA molecules and many protein molecules are made of chains of carbon and hydrogen atoms linked together, along with other atoms such as oxygen and nitrogen. Organic molecules are therefore the materials that form the physical structure of all living systems whether they are plants, animals, humans, or even bacteria and viruses.

The human body, as with other living systems, is not made entirely from organic materials. There is also a small amount of inorganic minerals, such as calcium and potassium. By far the largest component of the body is, in fact, water (about 60% in an adult). Our cells are like small balloons filled with water, with various components such as the nucleus floating within.

In our examination of the body so far we have progressed from cell physiology to biochemistry. If we continue this examination from grosser to finer levels of life we ultimately come to the field of physics, which probes still deeper into the structure of the atom. The term 'atom' comes from Greek, meaning 'not divisible'. The Greeks believed that if we divide any material structure into increasingly smaller units we will eventually reach a level that can no longer be divided. For example, we might reduce a grain of

sand to a powder. Using a process for breaking larger particles of matter into smaller ones we would eventually reach a fundamental unit that could not be divided, which they called ‘*atomos*’—*a* means ‘negation’ and *tomos* means ‘cut’. Therefore an atom was thought to be indivisible, or ‘unable to be cut’. Modern science discovered that atoms are actually made of smaller elementary particles, which are packets of energy.

Each new discovery has altered our basic understanding concerning the nature of matter and energy. The field of Quantum Mechanics has revealed, among other things, that energy is not emitted continuously but in discrete quanta, or packets. ‘Quantum’ comes from the Latin word *quantus*, meaning ‘how much’, and thus Quantum Mechanics refers to the mechanics of small quantities, or quanta, of energy.

Quantum Field Theory describes the dynamics of matter and energy in terms of four basic force fields: the gravitational force, the weak force, the strong force, and the electromagnetic force. Today, even these four forces, as well as all matter fields, have been found to be unified at their most subtle level, and the most recent theories of physics describe one Unified Field of all the Laws of Nature as the source of everything in creation, including the human physiology.

From a purely intellectual scientific analysis, we come to the conclusion that the human body is nothing but an expression of the Unified Field. The body consists of organs and organ systems; organs are made of tissues; tissues are made of cells; cells are made of molecules; molecules are made of atoms; atoms are made of elementary particles; and elementary particles are in fact quanta of energy, which are vibrations of underlying fields. These fields, or forces, are vibrations of one unified field of Natural Law.

## A Complete Science of Life

How we understand the human body depends upon our level of perception. If we look at it with the limited range of our normal senses, we see that it is composed of tissues, organs, and organ systems. If we expand the range of the senses with the use of a microscope, we begin to see cells within the body and components within the cells. With more powerful equipment, such as x-ray diffraction equipment or a synchrotron, we can perceive the body in terms of the finest levels of matter and energy. For example, we can detect the movement of neutrinos and elementary particles, and the effects of electromagnetic fields.

Is there any scientific equipment available to perceive the Unified Field of Natural Law? At present modern science is unable to examine this level, but there is a more expanded science, which includes a technique to experience directly the Unified Field. This technique is called Transcendental Meditation.

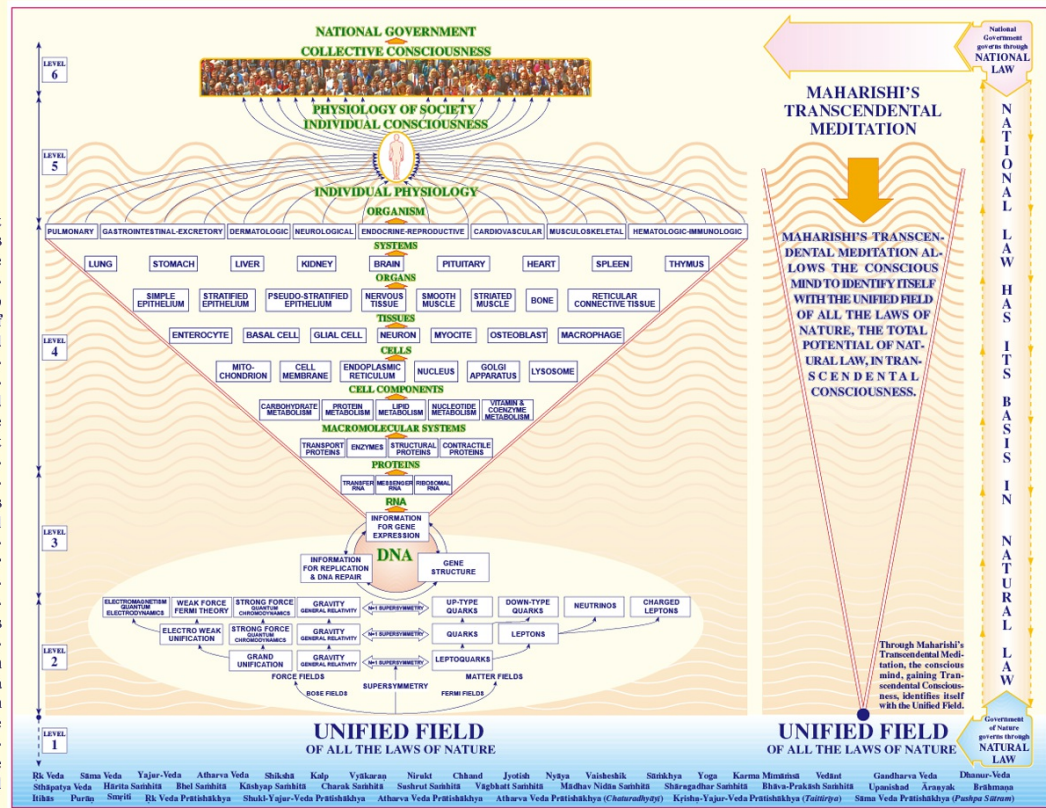
Maharishi's Transcendental Meditation allows any individual to experience directly the Unified Field of Natural Law as the Unified Field of pure consciousness. At that level of perception we see that the entire physiology is made of consciousness, pure intelligence. Whatever level of creation we examine—from the atomic level, to the molecular level, to the cellular level, to the organ level—we see the same inner intelligence manifesting into different forms of structures and functions.

At the basis of all these manifest forms of creation is pure Being, the Self, *Ātmā*. The self-interacting dynamics of consciousness create vibrations of pure consciousness, which are, as we have seen, the sounds of Veda, the Laws of Nature in their most concentrated form. These vibrations, or sounds of consciousness, collapse into manifest structures such as elementary particles.

**Figure 2.2 Unified Field Chart for Physiology (Next chart. Double tap on image to enter zoom in/out mode.)**

## Unified Field Chart for Physiology

The Unified Field Chart for Physiology illustrates the relationship of the macroscopic levels of a society and an individual to the microscopic levels of a cell and a molecule, and to the quantum-mechanical levels of Nature's functioning. The Unified Field of all the Laws of Nature is an unmanifest field at the source of all manifestation. It is a single, universal source of all orderliness in Nature—the home of all the Laws of Nature maintaining balance and order in every aspect of the universe. This chart also illustrates how the technologies of Maharishi's Vedic Science contribute to modern Physiology by providing a new integrated approach in which the whole range of Physiology can be appreciated from its source in the Unified Field of all the Laws of Nature.



We have seen in *Human Physiology: Expression of Veda and the Vedic Literature* that the Unified Field of Natural Law, the unmanifest inner intelligence of Nature, manifests and replicates itself at every level of creation, with the same Laws of Nature expressing themselves at every level (see figure 2.2 above). From one point of view we can say that the body is made of cells, but this presents an extremely limited picture—the more comprehensive reality is that the body is made of the Unified Field of Pure Consciousness, pure Being.

For our understanding to be complete we must include this more holistic view of life, provided by Maharishi's Vedic Science. Maharishi's Vedic Science, in fact, includes all of modern science, which provides a very advanced level of understanding of each of these levels. Through modern science we can learn about the detailed properties of the fundamental fields and forces of Nature, such as electromagnetism or gravity; we can learn about



the inner structure of elementary particles, atoms, or molecules, and how they interact with each other; we can study the innumerable biochemical pathways and biological functions in all types of living systems; and we can understand the details of the cells, tissues, organs, and organs systems within the human body.

## **Physiology: The Structure and Function of the Human Body**

Technically, anatomy is the study of structure and physiology is the study of function. The term physiology, however, has come to mean the study of both structure and function, because there is no function without structure. Even if we go to the level of the Unified Field, we find that a vibration or sound in that field has both structure and function.

Even though the body of a living being might appear as a solid material structure, its constituents—the atoms and molecules—are constantly being exchanged and replaced. This is analogous to a river, which may have a consistent appearance even though in reality it is composed of a steady stream of different water molecules.

The term body indicates a more static or solid structure, whereas the term physiology emphasizes more the self-referral dynamism, the lively field of all the Laws of Nature, the impulses of the Veda, the inner intelligence of the body, the field of self-referral consciousness governing and sustaining all the innumerable activities of our body.

The problem with the study of physiology is the same as with any field of science—the subject matter is so vast and complex that we could spend an entire lifetime unravelling a few details about one small area. The study of a single cell, for example, might well be a lifetime endeavour for a scientist. Even if we examine just one part of a cell, such as its membrane, we find endless details—the membranes are made out of lipids; they are connected to the cytoskeleton of the cell, which is involved in maintaining cellular

structure; they may have receptors attached to them for messengers, and even for second messengers that are part of their activity; some cell membranes can generate an electrical impulse; membranes have their own intelligence embedded within them in the form of proteins made from the DNA, etc. These are but a few examples of the vast complexity involved in the study of just cell membranes.

Fortunately, Maharishi has made the study of physiology, as well as of physics, chemistry, biochemistry or any other field, very easy for us with his revelation that the same universal Laws of Nature organise all levels of life. More importantly, these Laws of Nature are readily available to us in the form of sounds, or vibrations, of Veda and the Vedic Literature, and also in the characters and events of the Rāmāyaṇ.

In this chapter we will introduce some aspects of the physiology as a general summary with a few examples. The specific examples and descriptions are selected in view of their relevance for facilitating the understanding of the correlations between the physiology and Rāmāyaṇ. The significance of these highlights will gradually become clearer in later chapters.

## **Locating Totality at Every Point**

In the previous chapter we saw Maharishi's beautiful description of Totality in every point of creation. Seeing Totality in every point means seeing it in a quanta, an elementary particle or atom, a molecule, a cell or organ, or in a human being. Even the planet Earth can be considered as a point value.

In the infinite expanse of the universe each expression is a different level of a point. No matter how large it is, it is still a point when we look at it with respect to infinity.

By understanding Totality fully we can understand the total universe, but to understand it fully means to understand it in the context of the totality of all the Laws of Nature. The gift of His Holiness Maharishi Mahesh Yogi and the

Holy Tradition of Vedic Masters is the total knowledge of Natural Law in the form of Veda and the Vedic Literature, and a technique, Transcendental Meditation, with which to experience total knowledge in our own consciousness. Through the practical technologies of consciousness that Maharishi has made available, millions of people throughout the world have been able to experience and know Totality, and therefore gain mastery over all the Laws of Nature.

Maharishi has demonstrated in this scientific age that Totality can be located, experienced at every point, and that Totality is the essence of everything. Most significantly for human life, Totality is the essence of human consciousness, and indeed of the human physiology. Each of us is the embodiment of total Natural Law, and each of us is capable of spontaneously living and experiencing that Totality in our daily life.

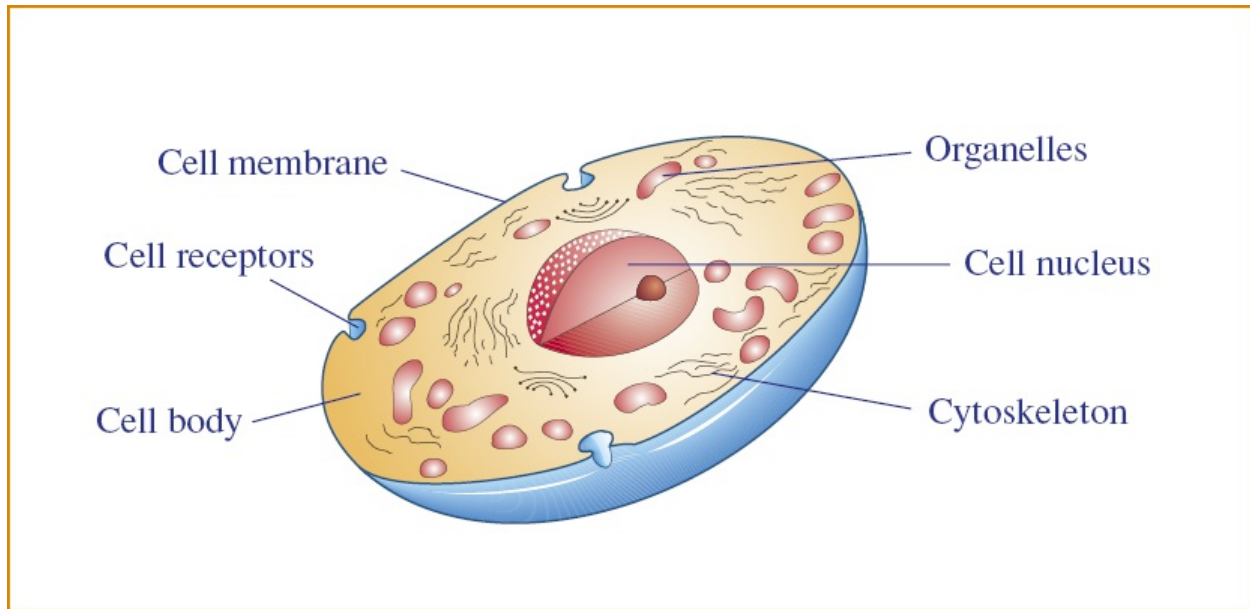
As we go through the details of the different levels of the study of physiology, it will be good to remind ourselves of the important realization that Totality is contained in every point of creation, so that when we see and enjoy the varied expressions of Nature in their complexity we will not lose sight of the fact that the holistic value of life is contained in every point.

There is a beautiful Vedic Expression summarizing Maharishi's teaching that Totality is contained in every point of creation:

नद्धद्योद्ध नद्धद्यो भद्धद्यति जायद्धदुमानः

*Navo-Navo bhavati jāyamānah*  
(*Rk Veda 10.85.19*)

*In the process of transformation, or evolution,  
it is the Totality that is reborn again and again.*



**Figure 2.3 A cell with its main internal parts**

## **The Cell and the Process of Development**

The cell is considered to be the smallest living unit of life. It can be a living organism by itself, such as single-celled protozoans or algae, or an even simpler form—a bacterium. As an individual unit of life, the cell breathes, eats, digests, maintains its energy, and reproduces itself.

The body is made of trillions of cells all working together. These cells are so small that even if we look at the skin with a normal magnifying glass we cannot see them. We need a microscope to see a cell.

There is an enormous variety of cells, of varying shapes and sizes. If we look closely, however, we find that there are certain similar structures within each cell. For example, in the centre of every cell we find the nucleus, which is usually spherical in shape. The DNA molecule is located in the nucleus.

All of the body's cells emerge from one original cell, called a zygote. Every human being starts out as a single zygote, which divides and multiplies itself to become the entire physiology. The zygote first divides itself into two cells,

each of which contains the complete information for the entire physiology. This is an example of fullness—the complete knowledge of the physiology—coming from fullness, the zygote, which also contains the entire structure of the physiology in seed form. This principle is beautifully illustrated in an expression from the Upanishads, which we cited in Chapter I:

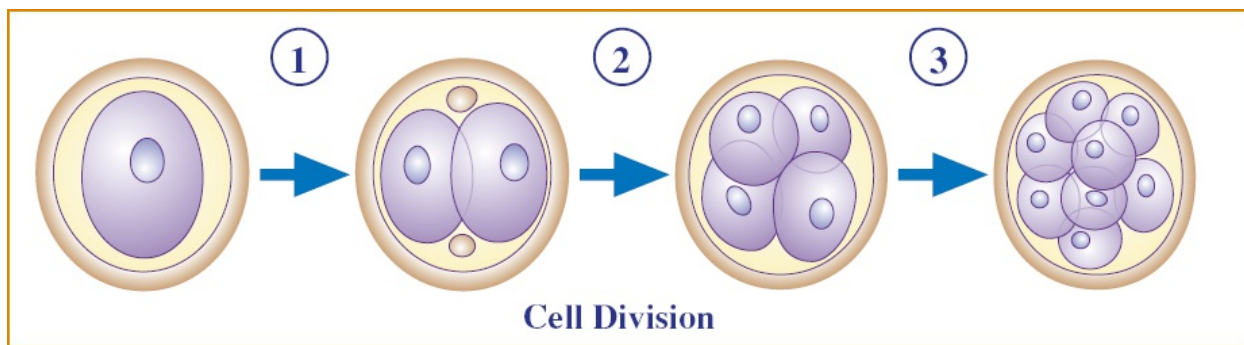
पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते  
पूर्णस्य पूर्णमादाय पूर्णमेद्ब्रह्माद्ब्रह्मशिष्यते

*Pūrṇam adaḥ pūrṇam idaṁ pūrṇāt pūrṇam udachyate  
pūrṇasya pūrṇam ādāya pūrṇam evāvashishyate  
(Bṛihad-Āraṇyak Upanishad, 5.1)*

*That is full; this is full; from fullness, fullness comes out;  
taking fullness from fullness, what remains is fullness.*

What emerges from one cell is not two half cells, but two full, complete cells. These first two cells are exactly alike, yet when they interact with each other there is a new intelligence that emerges, which sequentially unfolds a precise plan.

First one cell becomes two, then the two divide a second time and become four, and then these four divide a third time and become eight cells. The first three divisions occur within the first three days of life, in tune with the cycles of the Sun in the basic rhythm of Natural Law.



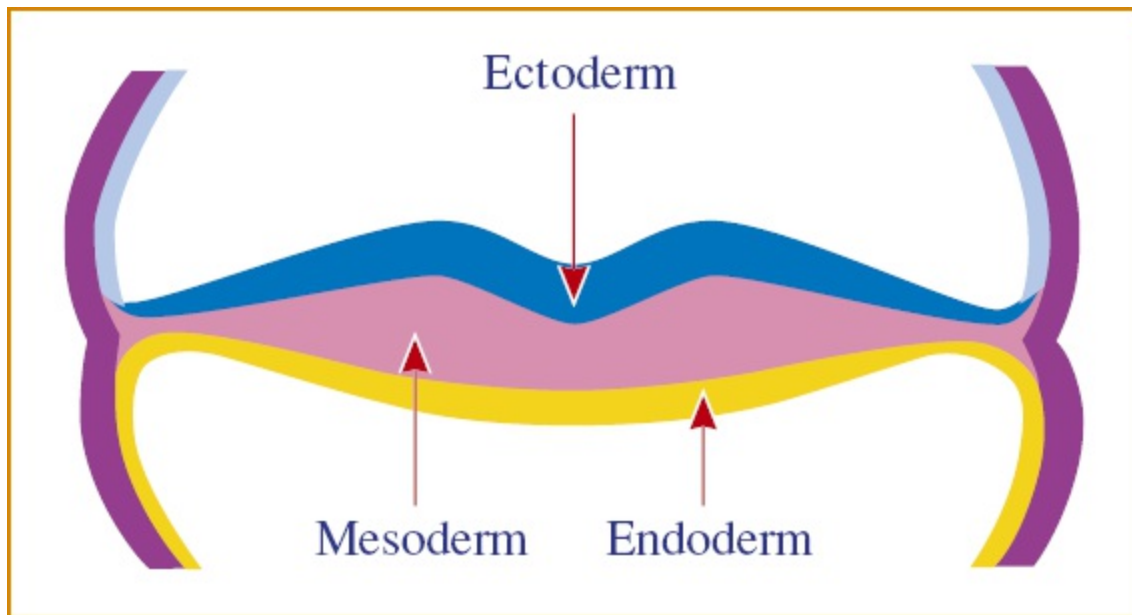
**Figure 2.4 Cell Division**

The details of the process of early cell division have been fully described in Chapter III of *Human Physiology: Expression of Veda and the Vedic Literature*, which shows how cell development follows the exact sequence of Maharishi's *Apaurusheya Bhāshya*. The cells divide in three steps, and in these three steps they create eight cells. We know that the first *Pāda* of the first *Maṇḍala* of Ṛk Veda has eight syllables. As Maharishi explains, this is the elaboration of the first sound, अक् (Ak). अक् (Ak) is like the first cell, which elaborated itself into eight cells. The divisions continue in a very beautiful way, ultimately progressing from one cell to eight.

Each cell has three basic components: the nucleus of the cell corresponds to the knower, or Ṛishi value; the cell organelles correspond to the process of knowing, or Devatā value; and the cell skeleton and membranes correspond to the known, or Chhandas value. The elaboration of the eight cells into their detailed components therefore gives  $8 \times 3 = 24$  aspects. These 24 aspects of the cell correspond to the first 24 syllables of the first *Richā* of Ṛk Veda.

During this process of division, the cells begin to specialize through the process of cell differentiation. Prior to specialization all cells appear alike, forming one homogenous group. Following cell differentiation they commit themselves to a particular set of functions that may require them to alter their shape or create new structures or extensions.





**Figure 2.5 The entire physiology emerges from three embryonic layers.**

For example, when a cell specializes to become a nerve cell it develops an extension called an axon, which enables it to send messages over a long distance. The axon is extremely thin and can sometimes be quite long, looking like a tiny thread. Liver cells develop a spherical or globular shape, while muscle cells develop a fatter, elongated shape.

Three distinct layers of cells emerge in the first stage of cell differentiation, each of which evolves into specific tissues and organs. These three layers are the ectoderm, mesoderm, and endoderm (figure 2.5 above). The ectoderm is made from ectodermal cells, which will become the human nervous system, including the brain, spinal cord, and nerves, as well as the skin (Rishi predominant). The endoderm consists of endodermal cells, which produce the lungs, thyroid gland, pancreas, thymus, liver, guts, intestines, and the digestive tract (Devatā predominant). Finally, the mesoderm, or mesodermal layer, is made of mesodermal cells, which grow into muscles and bone, as well as the heart, arteries, and veins (Chhandas predominant). All the tissues, organs, and organ systems emerge from these first three fundamental cell types.

## **Tissues, Organs, and Organ Systems**

Tissues, such as liver tissue, lung tissue, gland tissue, or brain tissue, are all made from a large number of cells that have a similar structure and function. For example, ‘muscle tissue’ refers to a group of muscle cells with a similar function. The muscle cells have an elongated shape, and contain special molecules and structures that enable them to contract and shorten their size when they are stimulated by nerve cells. For example, two important molecules within the muscle cells are actin and myosin, which enable contraction. These molecules react chemically, and as a result of their reaction cause the muscle cells and tissues to shorten and contract. The nervous system can send two different types of messages, an excitatory message that causes the muscles to contract, and an inhibitory message that causes the muscles to relax.

Since human physiology often contains sets of opposing muscles, it is important in any movement for one of the opposing muscles to relax while the other contracts. If the opposing muscles are activated at the same time and with the same strength, then that part of the body will become rigid and movement will be impossible. The movement of our muscles may seem easy, but even a simple action such as moving our hand involves innumerable biochemical processes and chemical exchanges, including millions of ions travelling across nerve or muscle membranes. We will find correspondences to the enormous activity taking place on the level of cells and tissues with events and characters in the Rāmāyaṇ. The entire Veda is found on every level of the physiology’s organization.

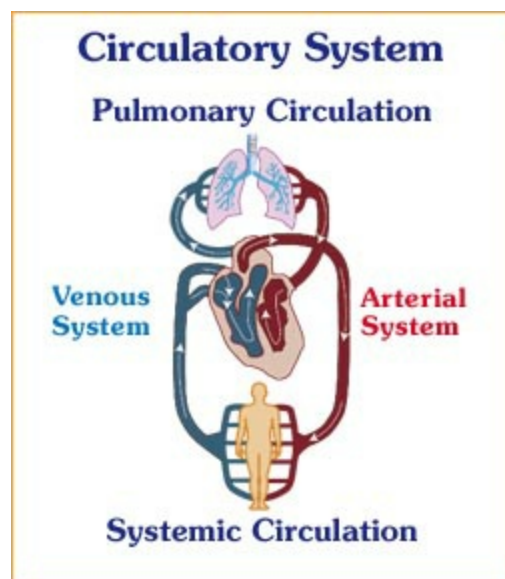
The next level of organization is the organs. An organ may contain several different types of tissue, which together form the organ’s structure. The heart, for example, is made of muscle tissue, nerve tissue, vascular tissue, and connective tissue.

## **The Heart and Circulatory System**

If we examine the heart in greater detail we see that it pumps blood throughout the body by means of a complex system of arteries and veins known as the circulatory system. Here we have the next hierarchical level of organization in which the different organs come together to function as a system. In this case, the heart and the blood vessels functioning together form the cardiovascular system. If we also include the integration of the lungs, which oxygenate the blood and eliminate carbon dioxide, then we have the cardiopulmonary system. Oxygenated blood emerges from the heart through the aorta and is distributed to all the organs of the body through the circulatory system. The blood brings oxygen as well as nourishment from food, such as carbohydrates and vitamins.

The heart and circulatory system accomplish this task by pumping blood throughout a complex system of vessels. The vessels are everywhere, supplying nourishment to the fingertips, the toes and head, all the cells and muscles, the internal organs and bones, and to the skin, which covers and protects the entire body. We could think of the circulatory system as similar to a network of pipes that reach every room in a house. (Chapters XX and XXI analyse this huge system of vessels in greater detail, particularly the arteries and veins, and show how every artery and every vein corresponds to a specific character described in the Rāmāyaṇ and the Vedic Literature.)

The two main branches of the circulatory system are the arterial system and the venous system. The arterial system brings nourishment to all the organs of the body, including the brain, the skin, different parts of the abdomen, and the muscles. The arteries divide in a number of ways, sometimes subdividing into several branches at the same point and at other times branching successively while the main trunk continues. The arteries



eventually branch into smaller vessels known as arterioles, which in turn branch into extremely small vessels known as capillaries. The capillaries connect the arterioles of the arterial system with venules of the venous system. Venules are small blood vessels that allow blood to return from the capillaries to the vein. The venules collect into smaller veins, which then collect into larger veins, which ultimately connect to the heart.

**Figure 2.6 The two main branches of the circulatory system are the arterial system and the venous system. Together they form two connecting loops (pulmonary and systemic circulation).**

The venous system is technically defined as the system that carries blood to the heart, and the arterial system as the system that carries blood from the heart. Together they form two connecting loops. In one loop oxygenated blood is pumped from the left side of the heart to the cells of the body and then returns to the right side of the heart as deoxygenated blood. In the second loop this deoxygenated blood is pumped from the right side of the heart to the lungs where it becomes oxygenated, and then returns to the left side of the heart where it enters the first loop again.

There are many such loops in the physiology, which are described in detail in Chapter VI of *Human Physiology: Expression of Veda and the Vedic Literature*. These looping systems are a basic element of the Vedic Structure as brought to light by Maharishi in his *Apaurusheya Bhāshya*, particularly in Rk Veda and its ten *Maṇḍals*.

Let us now consider a few more examples of organs and organ systems.

## **The Liver**

The liver is located inside the abdomen, and is the largest of the internal organs. It is part of the digestive system, and performs several hundred essential functions, including the digestion of fats, the storage of nutrients, the synthesis of proteins, and the filtration of wastes from the blood. In

medicine, the specialized study of the liver, its related organs, and the management of their disorders is called hepatology.

## **The Renal System**

Another important organ system is the renal system, which includes the kidneys. The kidneys purify the blood as it circulates from different parts of the body, eliminating accumulated wastes and toxins. The kidneys act as a kind of sieve, reabsorbing within the blood what is useful and removing what is harmful.

## **The Endocrine System**

The endocrine system is composed of a number of individual glands, including the pituitary gland, the thyroid gland, the suprarenal gland, and all of the other different glands of the body. These glands maintain the body's internal environment by producing hormones that move in the bloodstream and provide necessary information to the different organs and systems.

Other organ systems include the musculoskeletal system, which provides structure and strength and enables us to move; the immune system, which protects the body; the reproductive system; and finally the nervous system, which we will now consider in greater detail.

## **The Nervous System**

The nervous system is particularly important because it is the master organizer, the master synchronizer and harmonizer, of the entire physiology. Indeed, it is the master organ of the physiology, for it is through the brain that we feel sensations, have thoughts and desires, and express ourselves through speech and action. The brain is thus the ruler of the physiology, enabling us to see, hear, feel, cognize, interact, and fulfil our goals. Like a master switchboard that controls every light in every room of a building, it controls each part of the human physiology, receiving and processing all incoming

and outgoing information, and thereby unifying our awareness.

The nervous system can be divided into three major systems: the input system, the processing system, and the output system. The input system is the sensory system, which includes the eyes, ears, nose, mouth, skin, and special organs for sensing balance. Each of these sensory systems is connected to the nervous system through a network of nerves, which allows for adjustments and reactions to our ever-changing environment.

The input system connects with the processing system, which mainly includes the inner workings of the nervous system in the brain and spinal cord.

Once information is processed in the brain or spinal cord, it is sent to various parts of the body. This is the output system that directs all movement, action, and behaviour, and controls the physiology's internal life-support functions.

The output of the nervous system communicates with the different parts of the physiology in two different ways. One way is directly through the nerves, and the other is indirectly by means of hormones sent into the bloodstream by the endocrine system.

In the first case, direct communication along the nerves takes place primarily through the generation of electrical impulses to a specific target. For example, the output of the nervous system might have as its target a muscle in the arm or leg in order to stimulate some movement, or perhaps it might target a muscle in the vocal cords, leading to speech.

In the second case, indirect communication occurs when the target of the nervous system's output is a gland in the endocrine system. The nervous system stimulates the gland to first secrete a hormone, which then enters the bloodstream and globally affects different tissues.

In addition to dividing the nervous system functionally into three basic



components—the input, processing, and output systems—we can also divide it in other ways. It can, for example, be divided into the peripheral nervous system and the central nervous system. The peripheral nervous system includes all the nerves and fibres outside of the central nervous system. The central nervous system includes those nerves and fibres that are inside the brain and spinal cord. The central nervous system uses the peripheral nervous system to communicate with the whole body in a highly organized and efficient manner.

Finally, there is the division between the autonomic nervous system, which controls most of the internal life support systems of the body, and the somatic motor system, which controls voluntary movement.

## **The Neuron and Neural Circuits**

Having reviewed some of the divisions of the nervous system, let us now briefly consider a basic unit, the nerve cell or neuron. The neuron, like the other cells, is specialized: it is shaped and designed to perform specific functions of the nervous system. It has a cell body, which is called the soma of the cell. Inside the cell body is the nucleus containing DNA, the inner intelligence of the neuron. The cell body also has special extensions that can both receive and send information. The receiving extensions are called dendrites and the sending extensions are called axons.

An axon can send information from one neuron to another, or from a neuron to a muscle. A single axon can be a metre or more long, sending information from the brain down to the spinal cord. Axons are very thin and tiny—in fact, a special electron microscope is needed to see them properly. The internal structure of the axon and the materials surrounding it enable the axon to send information very quickly over long distances. This quick action is necessary for many situations.

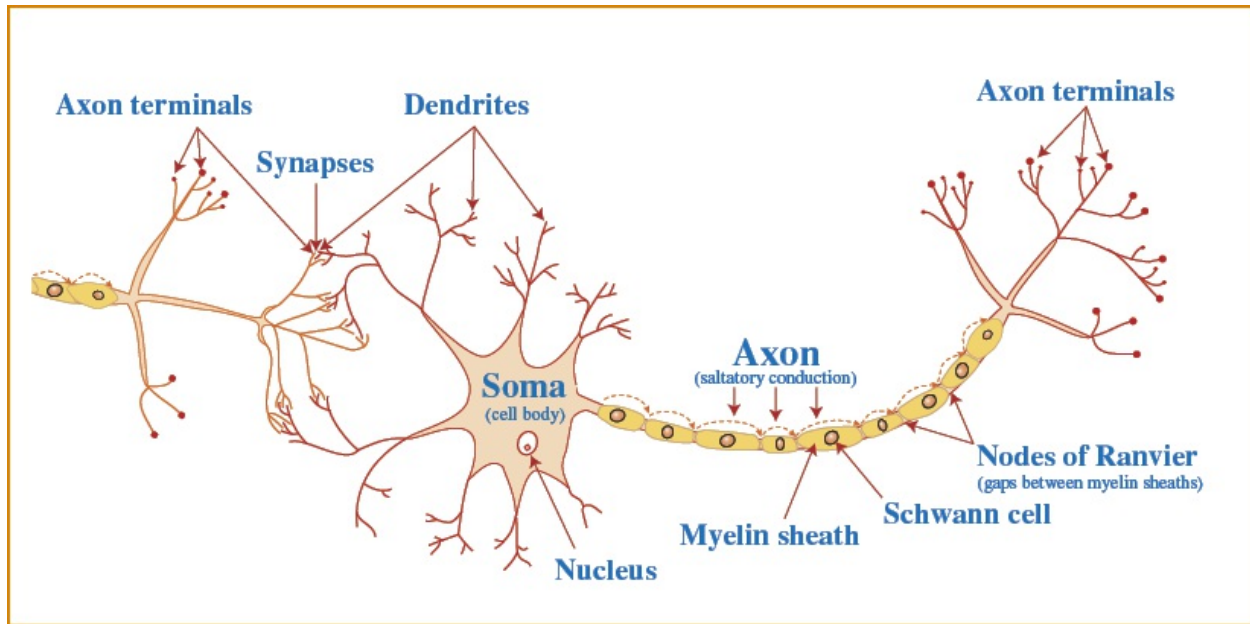
For example, if we put a finger near or into a flame, it will be necessary to quickly withdraw it. The processing of the initial information and the

resulting response takes milliseconds: we sense the heat from the fire at the tip of the finger, an impulse is sent from the finger through the arm to the spinal cord, which then moves to the brain for processing. The nervous system then causes the muscles to rapidly move the hand away from the danger in a highly coordinated and efficient, reflexive manner.

If we look closely at the axon's structure we find that certain axons have a special insulation wrapped around them, which allows nerve impulses to be conducted more quickly. This insulation consists of special cells called Schwann cells, which wrap themselves around the axon. The Schwann cell is shaped like a rolled sheet of paper with layers of insulating material called myelin between each coil.

Hundreds of Schwann cells are lined up next to each other all along the axon. However, there are spaces, or gaps, between each cell. The nerve impulse travels quickly along the insulated areas until it reaches a gap, and then jumps from one gap to another.

Scientists call this process saltatory conduction. The word saltatory comes from the Latin word *saltare*, which means 'to hop' or 'to leap'. From the tip of the finger to the spinal cord, and from the spinal cord back to the muscle, the nerve impulse jumps along the nerve fibres. This saltatory movement allows the impulse to be jumping, while always maintaining itself. Again this reminds us of the Vedic Expression mentioned earlier: पूर्णमदः पूर्णमिदं पूर्णात् पूर्णमुदच्यते *Pūrṇam adaḥ pūrṇam idaṁ pūrṇāt pūrṇam udachyate*—*That is full; this is full; from fullness, fullness comes out*. Maharishi has translated udachyate as 'jumping' in some contexts, and we can see this jumping taking place in the nerve as it conducts its activity and renews itself.



**Figure 2.7 The structure of a neuron**

In figure 2.7 we can see the different parts of the cell: the body with the nucleus in its centre; numerous small extensions extending from the cell body called dendrites, which receive information; the long, tiny axon, only one millionth of a metre wide, extending from the cell body; the Schwann cells wrapped around the axon; and the small tree-like structure called the axon terminal at the axon's end.

The axon terminal has undergone a process of arborisation. 'Arborisation' comes from the French *arbre*, which means 'tree'. These ends of the axon communicate to other cells through small microscopic gaps called synapses, where electrical impulses travelling along the axons are converted to biochemical messages.

The actions of the nervous system are usually localized to specific areas, such as a nerve impulse travelling from one neuron to another. The actions of the endocrine system are more general since hormones are released into the bloodstream, where they act globally on many areas of the body. In certain areas, such as in the pituitary gland, the nervous system and endocrine system

are integrated together to form the neuroendocrine system. We will look more deeply into the neuroendocrine system later in the context of specific passages in the Rāmāyaṇ.

The Rāmāyaṇ gives us a story of Natural Law on all levels of life, which is beautifully displayed in the human physiology, especially in the nervous system. In fact, the study of the physiology is made much simpler and more understandable through the study of the Rāmāyaṇ. The study of physiology from the perspective of pure structure and function can baffle even the best student due to its complexity and enormous detail. However, if we study physiology as an expression of Natural Law, as it is described in the Rāmāyaṇ, then it becomes an intimate, living reality.

## **The Human Brain**

The human nervous system, and especially the human brain, is a remarkable instrument, precisely organized so that it can perform a wide range of activities under varying conditions and requirements. We have seen how even simple reflexive activities, such as removing a finger from a flame, involve three basic activities: sensory input (detecting the heat), neural processing (determining which muscles need to be contracted and relaxed), and finally motor output (activating the muscles to contract or relax).

Imagine how much more complex the processing of information is within the brain when we are involved in activities such as emotional interactions or creative decision making. Even recognizing a face in a crowd, or remembering a past event from 20 years ago, may require highly intricate neural processing involving millions of neurons.

There are so many automatic processing systems ingrained within the human nervous system for visual or auditory recognition that it can easily and accurately recognize one face as a child's and another as being Japanese or American. What happens when we do something as simple as look at a

flower? The light comes from the Sun on the flower and reverberates, and then comes to the eye, where there are millions of neurons processing a great deal of initial information: the three-dimensional shape of the flower, its colours, distance, etc.

The simple experience of observing a flower involves highly complex neural networking within the nervous system, which must be integrated in order to give us a final subjective experience of the flower, with all its colours, smells, etc., along with any memory it may evoke. If we want to describe the experience of the flower, further integration of other areas of the brain are then involved in speech. Millions of dollars have been spent trying to create computer software or a robot that can perform even such simple tasks as pattern recognition.

Let us examine other features of the brain and nervous system, and how they correspond to Veda and the Vedic Literature.

### **Examples of the Correspondence between Human Physiology and Veda and the Vedic Literature**

There are two main types of processing systems within the human nervous system: the processing of somatic inputs, which are open to conscious awareness and involved with the voluntary motor system, and the processing of visceral or autonomic inputs, which are involved with the autonomic nervous system, and which are largely not open to conscious awareness or control. The autonomic nervous system handles functions in the body such as the regulation of blood pressure, the level of amino acids or sugar in the blood, and the internal temperature of the body, all in an automatic manner without conscious decision.

These two processing systems correspond to the two divisions of Yajur-Veda, Shukla (white) and Kṛishṇa (black). This correspondence between Yajur-Veda and the processing systems was examined in great length in *Human Physiology: Expression of Veda and the Vedic Literature*,<sup>1</sup> so we will only

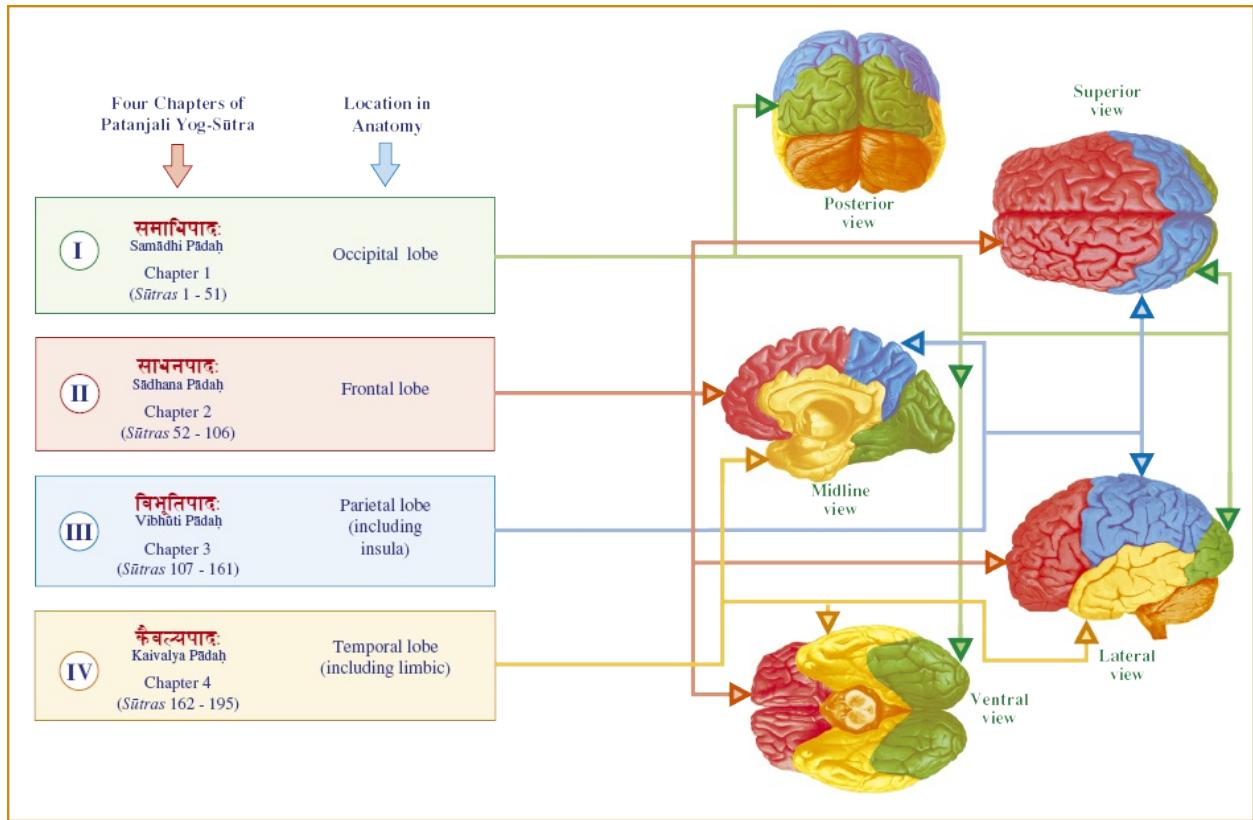
mention here that Shukl-Yajur-Veda corresponds to the somatic processing systems and Kṛishṇa Yajur-Veda corresponds to the visceral, or autonomic, processing systems. The many details of this correspondence again demonstrate that the same intelligence administering the universe is available in Veda, and is found within the structure and functioning of the human physiology.

We also found that the association fibres of the brain correspond to the branch of the Vedic Literature known as Yoga.<sup>2</sup> If we examine the gross structure of the brain we see that it comprises four lobes: the frontal lobe in front, the parietal lobe on top, the occipital lobe in back, and the temporal lobe on the side. These four lobes correspond to the four chapters of Yoga, which contain 195 *Sūtras*.

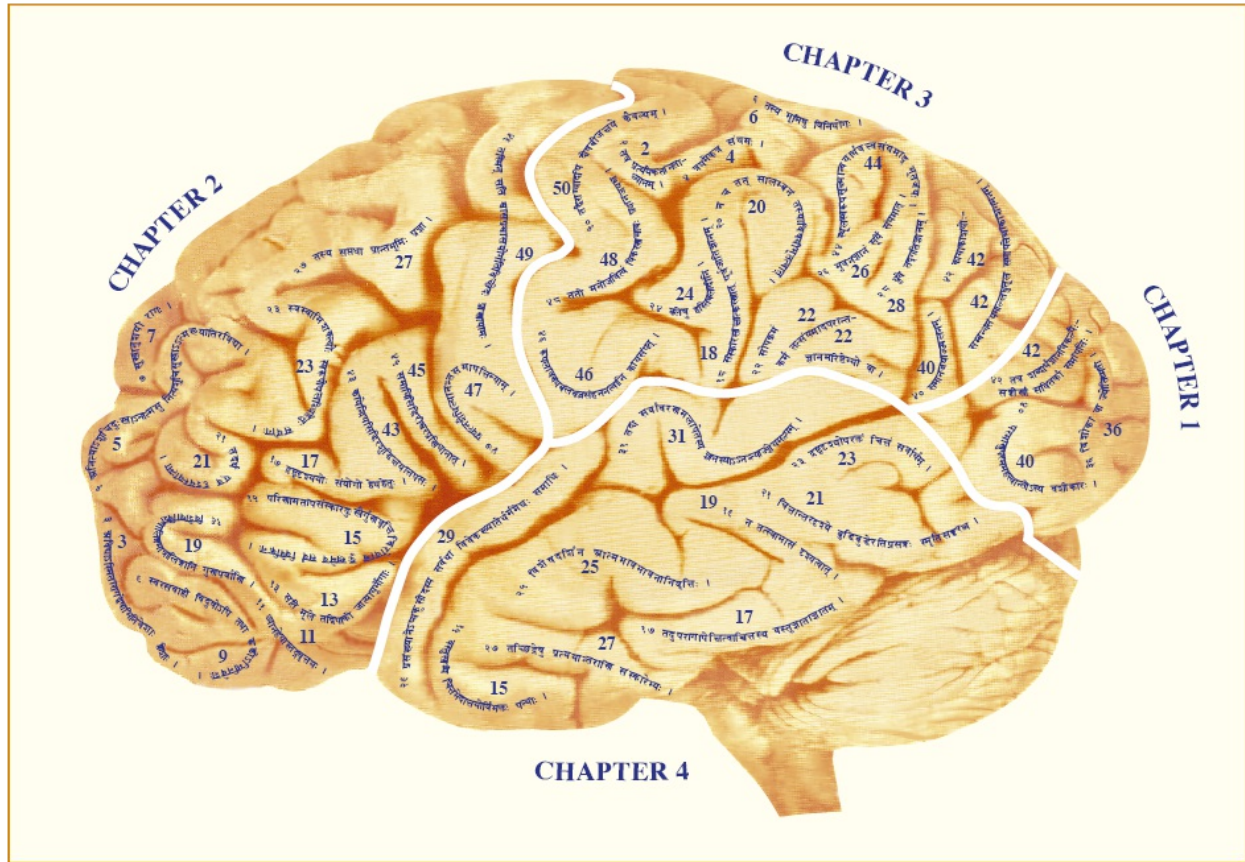
To understand where these *Sūtras* are located in the physiology, we need to go to a finer level and examine a cross section of the brain. What we find is that the brain comprises both grey and white matter. The grey matter contains the cell bodies of the neurons and the white matter consists of their fibres or axons. The thin outer surface of the brain, called the cortex, contains mostly grey matter and is convoluted into small mountains, called gyri, and valleys, called sulci.

Directly beneath this thin outer layer is white matter, which consists of the association fibres that connect the different areas of the brain together. The 195 *Sūtras* of the four chapters of Patanjali Yog-Sūtra correspond to the association fibres of the cerebral cortex. These fibres connect the areas under each adjacent gyrus as well as the more distant parts of the brain together, thus helping unify the functioning of the brain. This was described in great detail in *Human Physiology: Expression of Veda and the Vedic Literature*.





**Figure 2.8 The four cortical lobes with their corresponding chapters in the Yog-Sūtra**



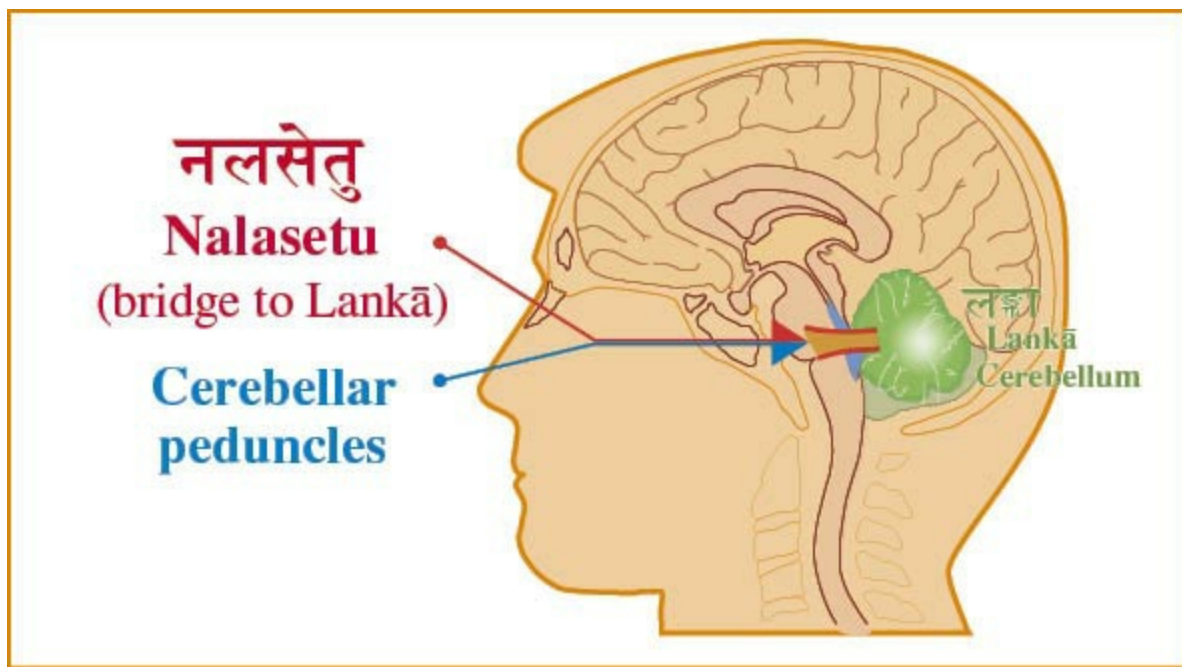
**Figure 2.9** Each Yog-Sūtra corresponds to one of the cortical gyri (folds), as illustrated in this left lateral view of the brain.

If we now focus specifically on the Rāmāyaṇ, we also find striking correlations between the main characters and certain parts of the brain. Looking at the gross structure of the brain we see that its four lobes, called the cerebrum or big brain, form its largest portion. Supporting the cerebrum is a stem-like structure called the brainstem. Behind the brainstem and underneath the cerebrum is another smaller structure, called the cerebellum, or little brain.

The main character of the Rāmāyaṇ, Rām, is initially located near the top of the cerebrum, covering an area that includes adjacent parts of the frontal and parietal lobes (we will study this in greater detail later). As we shall see, the full value of Rām unfolds in the story of the Rāmāyaṇ. In terms of the

physiology this means that when he realizes his full potential, his influence encompasses the entire brain. Rām is an incarnation of Viṣṇu, and therefore in his full value represents the brain's total dynamism, with rulership over the entire physiology. The story of the Rāmāyaṇ is the story of how Rām gains rulership over every part of the brain and of the entire physiology.

One of the other principal characters in the Rāmāyaṇ is Rāvaṇ, who corresponds to the lateral hemispheres of the cerebellum. The cerebellum corresponds to Lankā, over which Rāvaṇ rules. The cerebellar hemispheres have ten lobes, corresponding to the ten heads of Rāvaṇ. The brothers of Rāvaṇ, including Vibhīṣaṇ, can all be found in certain key structures within the cerebellum (described later).



**Figure 2.10** The bridge to Lankā (*Nalasetu*) corresponds to the cerebellar peduncles.

The position of the cerebellum with respect to the whole brain is similar to the position of Lankā relative to India, which are separated geographically by a narrow stretch of the ocean. Between the cerebellum and the brain is a small area that contains cerebrospinal fluid. The neural fibres that connect the

brainstem to the cerebellum are called the cerebellar peduncles. They correspond to *Nalasetu*—the bridge that Rām built between India and Lankā.

During his exile, Rām passed through several forests on his way to Lankā, such as the Daṇḍak and Chitrakūt forests, which are located in the brainstem. Within these forests Rām encountered different *Ṛishis*, such as Ṛishi Agastya, each of whom corresponds to a specific structure in the brainstem. Rām’s father, King Dasharath, is also located in the brainstem, which is involved in the control and rulership of many basic physiological functions as well as in the regulation of states of consciousness.

A modern analysis of the brain focuses on its evolution in different species and divides the brain into an ‘old brain’, which controls more basic and instinctual functions, and a ‘new brain’, which controls more complex cognitive functions found only in higher species. If the basic animal instincts contained in the ‘old brain’ are not controlled by the ‘new brain’, certain subconscious feelings, such as the need for self-preservation, can lead to aggressive and violent behaviour.

There is a part of the old brain called the limbic system, which is a complex network of structures surrounding the centre of the brain. This, as we shall see, is the location of the final battle between Rām and Rāvaṇ. The Rāmāyaṇ tells us that this battle took place in the sky above Lankā between the Sun and the Moon. In *Human Physiology: Expression of Veda and the Vedic Literature*, we find that the Sun, Sūrya, and the Moon, Chandra, are located in the centre of the brain, which is next to, or part of, the limbic system.

The brain, as with every part of the body, is nourished by vessels and arteries. Rām’s father, King Dasharath, had three *Patnī*<sup>3</sup>, who correspond to three arteries within the brain. The anterior cerebral artery nourishes an old part of the brain that is concerned with subconscious thoughts of self-preservation, in addition to nourishing the frontal and prefrontal cortex. This artery corresponds to Kaikeyī, the second *Patnī* of Dasharath and the mother of Bharat, one of Rām’s brothers. It is Kaikeyī’s selfish concern for the status of

her own son that caused Rām to enter into exile.

The middle cerebral artery nourishes the area near the top of the brain in which Rām is located. This artery corresponds to Kausalyā, the first *Patnī* of Dasharath and the mother of Rām. The posterior cerebral artery corresponds to Sumitrā, Dasharath's third *Patnī* and the mother of Rām's two other brothers, Shatrughna and Lakshman.

This gives us a brief overview of some of the areas that we will be considering as we outline the relationships between different aspects of the Rāmāyaṇ and the physiology. We will also examine the manner in which groups of neurons with a similar function come together to form structures called nuclei and ganglia, and how certain nuclei within the brainstem correspond to different *Ṛishis* and Kings. We will discuss each of these correlations many times throughout the book so that they become increasingly familiar to us.

Our analysis will be very detailed, identifying all the characters in the Rāmāyaṇ with specific structures within the physiology. The relationships between characters in the Rāmāyaṇ, whether they are ruler or ruled, brother, son, or mother, etc, will be accounted for in terms of their relationships with specific parts of the physiology. This will enable us to see how the human physiology is a true replica of total Natural Law as available in Veda and the Vedic Literature, and in particular in the Rāmāyaṇ.

## **The Study of Physiology Is the Study of Veda**

The study of human physiology is ultimately the study of the intelligence of Natural Law, the study of how Natural Law functions, how the universe functions. When studying human physiology in terms of its essential intelligence, we are studying the same intelligence that underlies the functioning of the entire universe with all its stars, planets, and galaxies. We are also studying the basis of society, the basis of relationships between individuals, and even between nations.



The study of physiology is the study of consciousness, and the study of consciousness is the study of physiology. Maharishi explains that when we study the entire field of consciousness by knowing it and being it, we awaken within ourselves the intelligence that is at the basis of the entire universe.

The practice of twenty minutes of Transcendental Meditation twice daily improves our health and physiology, as scientific research has shown, but it is much more than a practical way to relax and relieve ourselves of the pressures and stresses of the day. It is a highly refined technology of consciousness, which unfolds the ability to act in spontaneous accord with Natural Law under all circumstances.

The Laws of Nature are clearly so complex and specific that to try and analyse them intellectually and follow them one by one is virtually impossible, and can only lead to a feeling of frustration and inadequacy, and the questioning of every thought and action. By studying total Natural Law in such a way that one knows oneself on the level of consciousness, we automatically unfold in our awareness the full value of Natural Law—spontaneously we are able to think and act in accordance with Natural Law. This is the true purpose of education and the fruit of all knowledge.

It is under the guidance and blessings of His Holiness Maharishi Mahesh Yogi, Guru Dev, and the Holy Tradition that this complete and perfect vision of human physiology has unfolded before us. The Rāmāyaṇ is in the human physiology, Veda is in human physiology. The study of physiology has now become the study of the Veda. Everywhere we look in the physiology we see Veda. Matter is Consciousness.

### ***Footnotes***

1. See pp. 91–97.

2. Ibid., pp. 155–172.

3. See textbox entitled ‘[The Meaning of Family Relations in the Context of the Rāmāyaṇ](#)’, Chapter VI.





# Chapter III

## The Principal *Devatās*: Shiva, Vishṇu, Brahmā

**I**n the previous introductory chapters, we examined highlights of Maharishi's Vedic Science on one hand and the human physiology on the other. Most significantly, we established that the physiology is ultimately made out of the Unified Field of Natural Law when seen from the perspective of modern science, and of pure consciousness when described from the Vedic perspective. We came to the same conclusion that the physical structures of atoms, molecules, cells, organs, and the entire human physiology are nothing but expressions of the Unified Field—nothing but pure Being, pure existence, pure consciousness.

We also found that total Natural Law, the totality of all the Laws of Nature that organize the functioning of the entire universe, is located in the Vedic Literature as the Constitution of the Universe, as brought to light by Maharishi. And we saw that the Constitution of the Universe expresses itself into sound reverberation and ultimately into the material structure of every aspect of creation.

The descriptions that we saw in the preceding chapter also introduced some examples of the correlations between the physiology—including its organs and cells and their interactions—and the expressions of the Laws of Nature, as available in Veda and the Vedic Literature. As our understanding of the relationship between human physiology and Natural Law unfolds, we will find that all the different aspects of the Rāmāyaṇ are just the display of the evolutionary processes taking place in our physiology.

Most people might initially find the concept of a correlation between human physiology and events recounted in an ancient book (such as the Rāmāyaṇ) to

be foreign, or even strange. In the previous chapters some of the scientific logic behind this was presented. For simplification, let us consider it through two analogies:

When an architect plans a building, he conceives its structure in his mind and then draws it on paper so that he can later build it on the ground. And when a physicist calculates how a particle ought to behave, he uses his mind and intellect, and based on his practical and mathematical knowledge he comes to a conclusion that he later verifies through an experiment.

In both cases there is a mental picture created, which is based on a concept and/or logic, which is either produced or verified in the physical world—an abstract concept or a pure logic finds its counterpart in the physical gross reality, even though to different extents. Thus we see the human mind conceiving something and then either creating it or verifying it in the real world. This means that mental images properly checked and ordered by the discriminating intellect are in tune with the Laws of Nature. This is what allows a human being to organise or understand the physical world. In other words, the mental structure is like the physical structure.

Mental structure is abstract. You cannot dissect the mind and physically find inside it either the architect's building or the physicist's analysis of the particle's behaviour. It might, however, become possible one day to be able to analyse the functioning of the nervous system and uncover how and in what sequence the neurons fire when an architect conceives the details of his building (although we are still quite far from having this precise grasp of brain functioning).

What we have here are two fine levels of structure, one nearly totally abstract in the mind and the other on the vibration level of the brain, like a set of impulses that fire back and forth in various directions creating a physical, yet very subtle, image of the architect's building. The architect could, of course, express in speech what he has in his mind. This is yet another level of the expression of the building. Or he could draw it, in which case we would have

a more expressed value of the building in the direction of its being built.

All these are real levels of the building's expression, and indeed the building would never manifest unless the subtle aspects were present. This is how we can see that structure can be present on abstract levels as well as on more concrete levels.

Furthermore, for the architect to be able to conceive anything, he has to be conscious, he has to have consciousness. It is on the screen of consciousness that everything takes place. As we discussed in previous chapters, all structures and all manifestations are ultimately expressions of pure consciousness, the Unified Field of all the Laws of Nature.

For illustration and summary, let us list some of the different levels of expression of the building in our example:

1. **Non-manifest structure:** pure potentiality, all possibilities, pure consciousness, *Ātmā*;
2. **Abstract structure:** mind, intellect, feelings, ego, desire, concept of a building;
3. **Structure of brain activity:** how the physical brain holds the structure of the building in its neuronal, electrical/biochemical functioning;
4. **Reproduce the patterns of brain activity:** use a transducer that perfectly replicates these finest, almost abstract aspects of brain activity as a set of sound waves or vibrations (a transducer takes one form of energy or expression and faithfully reproduces it in another form of energy or expression. For example, you can hear a neuron firing through equipment that transduces the electrical firing of the neuron on the cellular level into a sound wave);
5. **Expression of the structure in speech:** describe the building in words;
6. **Visual level of structure:** draw the building;

## **7. Most physical structure: build the building.**

The pure mathematical calculation that allows the physicist to predict the behaviour of a particle reveals yet another secret. The logic used by the brain and the mind of the physicist corresponds to the same logic used by the cosmos and the entire universe. They have the same ‘mental’ structures. They obey and work under the same laws. This is Natural Law and this is why a human being can understand Natural Law.

Maharishi revealed to us that Veda and the Vedic Literature contain in their structure all the Laws of Nature. He further pointed out that the most complete and fundamental significance of Veda lies in its structure, and not, as has often been assumed, in the meaning of the texts.

If we were to compare the levels of expression of the structures of the Veda with the levels of expression of the concept of a building and its structure as described in the above example, it would give us the following seven levels:

- 1. Non-manifest structure:** pure potentiality, all possibilities, pure consciousness, *Ātmā*;
- 2. Veda experienced on the finest level of one’s awareness:** Vedic Cognition;
- 3. Structure of brain activity:** how the physical brain holds the structure of the Veda in its neuronal, electrical/biochemical functioning;
- 4. Chanting of the Veda by Vedic Paṇḍits:** this is like the transducer;
- 5. Translation and interpretation of the Vedic Texts:** description of the building through speech;
- 6. Writing down the Vedic Texts:** drawing the building;
- 7. The physical universe in its totality including the human physiology:** the building as a gross physical structure.

In *Human Physiology: Expression of Veda and the Vedic Literature*, we show how the human physiology is modelled exactly in accordance with the structure of the sounds of Veda. This research explains how Natural Law expresses itself on all levels of creation, how Veda is the Constitution of the Universe, and how human physiology contains all the Laws of Nature. It further brings out how abstract Natural Law expresses itself as sound in the Veda, as physiology in a human being, and as the total universe.

As we examine the Rāmāyaṇ, we will find that it reveals different levels of Natural Law, which transform from one expression to another in a systematic, orderly way. When one cell becomes many cells, and the many cells differentiate into organs and organ systems, there is an intelligent scheme—each cell knows at what point to stop, at what point to evolve, at what point to cooperate, and at what point to rest. We find that this orderly structure and function follows the same orderly patterns available in the Vedic Literature.

These transformations always take place in an orderly manner because all the Laws of Nature are present at every point in the unfoldment of Natural Law, interacting with each other to create the universe and human physiology. When we consider them on the surface level we can see that there are many millions of Laws of Nature, each expressing an aspect of reality depending on the needs of the evolutionary process. But in reality they have one common source in the Unified Field.

Individual Laws of Nature are always working together, though they may sometimes appear to be in opposition. For example, there are laws of transformation and there are other laws that prevent change from taking place. There are also processes in the physiology that enable cells to maintain a specific shape and a basic balance and constancy in their cycles of activity, and which continuously work to maintain that sameness even on the surface level. Other laws within the cell allow it to secrete a hormone at one time while at other times prevent that same hormone from being secreted, or make



the cell react and adapt to different environmental requirements in different ways. These values of change and non-change, of maintenance and of transformation, may appear to be contradictory, but they are always working together to fulfil the requirements of the physiology.

Indeed, the Laws of Nature are never contradictory. Some may appear opposite each other and seem to conflict, but ultimately they are working together. They may be functioning on different levels of Nature—subtle and gross, creative and destructive—but in their interaction they always promote evolution. In the case of human physiology they guide the growth of life toward enlightenment, life in perfection.

### **Vedic *Devatās* in the Rāmāyaṇ**

When we examine the Rāmāyaṇ we find that the story includes a category of beings called *Devatās*, who are fundamental Laws of Nature predominantly engaged in transforming, maintaining, and ensuring the orderly progression of life. Maharishi describes the Vedic *Devatās* as the creative powers of cosmic dimension that permeate the entire universe—they are the Laws that organize every aspect of creation, maintaining its perfect function. In modern times the term *Devatā* has been equated with ‘Deity’, and while it is certainly possible to look at *Devatā* from this angle for those who have this preference or inclination, *Devatās* in our consideration are examined from a scientific perspective in terms of Natural Law. In this context we could say that *Devatā* refers to a Law or a complex set of Laws of Nature.

The Laws of Nature are omnipresent (always available at every point in creation); omnipotent (they are invincible because no matter what you do you cannot break them—it is a principle in science that any theorem or assumption that contradicts an established Law of Nature is by definition wrong); and omniscient (they always act based on total Natural Law, available to them at every point in creation, and in perfect harmony with all the other laws). Seen from this perspective the Laws of Nature have indeed qualities of what is usually considered ‘divine’! When we say therefore

‘*Devatā* is Natural Law’, we are not diminishing them but giving them their true full value and dignity.

Every *Devatā* has a specific sphere of influence in the administration of the universe, ranging from the interactions between sub-atomic particles to the motion of the galaxies. In fact, the *Devatās* are so fundamental to the universe’s functioning that they are all-permeating, they are one within the other while also maintaining their differentiated status.

It is important for us to bear in mind, however, that the *Devatās* are ultimately not different. They may appear distinct, even antagonistic, but in essence each functions as part of the steps of evolution that allow an individual to unfold higher states of consciousness, which in the Rāmāyaṇ is seen in terms of Wholeness overtaking the entire physiology and the entire society. The notion of difference between *Devatās* arises from an incomplete or limited level of perception or arises from an incomplete analysis. It is the same as saying that electricity is something separate, totally distinguished, and independent from magnetism, whereas we know that they are the same electromagnetic field.

In Chapter XI of *Human Physiology: Expression of Veda and the Vedic Literature*, we discussed how the *Devatās* are found in human physiology. This analysis again is not philosophical or religious, but is a scientific reality, as evidenced by the perfect correspondence between both the forms and functions of the *Devatās* and the equivalent physiological organs and systems.

When we examine the Rāmāyaṇ as a description of human physiology, we naturally want to see the most fundamental forces of Nature, the basic powers of creativity and intelligence, and how they are found in our body. Therefore we will begin our analysis by considering the *Devatās*, because they are the most profound level of Nature’s functioning, creating and administering all the different organs, systems, and relationships of our physiology.

## The Six Fundamental *Devatās* and Their Role in Human Physiology

In the Vedic Literature there are six fundamental values of intelligence: Shiva, Vishṇu, and Brahmā, and also Durgā, Lakshmī, and Saraswatī. The first three have male characteristics and represent *Purusha*, the silent witnessing quality of intelligence, or self-referral structure of pure knowledge, and the second three have female characteristics. These correspond to *Prakṛiti*, the dynamic creative quality of intelligence, or organizing power inherent within pure knowledge.<sup>1</sup> Ultimately *Purusha* and *Prakṛiti* are not differentiated, they are the same reality. But in order to express itself the one Reality must break its symmetry.

As we discussed in Chapter I, in order for self-referral consciousness to express itself there is an observer who observes and there is a process of observation that connects the observer with the observed. On the conceptual level this creates differentiation, the quality of separate values that are the beginning of the expression of differences. How are these expressions controlled? How are they maintained? How are they able to evolve without losing track of Wholeness to ensure that Natural Law evolves perfectly?

The administrators of this process are these six *Devatās*, who uphold the evolution and transformation of Natural Law. Therefore when we study the Rāmāyaṇ it is necessary for us to first examine these *Devatās*, both as they are described in the Rāmāyaṇ and as we find them in other aspects of the Vedic Literature. Having analysed them, we will then consider the central characters and the details of the story along with their one-to-one correspondence to physiological structures and processes.

In the Vedic Tradition the three basic *Devatās* on the *Purusha* side who are considered pre-eminent are Brahmā, Vishṇu, and Shiva,<sup>2</sup> each of whom plays a role in the Rāmāyaṇ. Maharishi has described how each embodies Totality in a different form: Shiva is total Natural Law in terms of silence; Vishṇu is total Natural Law in terms of infinite dynamism; and Brahmā is also total

Natural Law, but as the creative force. We will discuss these three *Devatās* in the following pages, and the three *Devatās* associated with *Prakṛiti*—Saraswatī, Lakshmī, and Durgā—will be treated in detail in Chapter IV.

## Shiva

Maharishi describes Shiva as infinite, pure, unbounded silence, the total absence of agitation or excitation. Shiva is flat unboundedness, fully awake within itself, the self-referral field of pure Being.

Shiva expresses himself in the physiology as the gaps and spaces throughout. These are ultimately empty spaces and may seem inconsequential, but in fact they are highly significant because the entire physiology is structured around gaps and empty spaces. The empty spaces are surrounded by groups of molecules that form membranes and cells, and these membranes, these basic structuring units of the human physiology, create the different compartments, divisions, and subdivisions that make up the cell and ultimately the entire physiology.



**Figure 3.1 Traditional representation of Shiva**

If we analyse the name Shiva, we see that it expresses both infinite silence and its physiological expression as the gaps and spaces. शि (*Shi*) in the Vedic Language of Sanskrit means ‘peace’ or ‘calmness’, while वृद्ध (*Va*) means ‘air’ or ‘space’. Together they convey both the concept of an eternal, silent, transcendental field, as well as the silent gaps within the physiology.

Even the most cursory examination of the physiology reveals many different levels of space and gaps. For example, the solid organs are separated from each other by gaps

—the heart is separated from the kidney, the kidney is separated from the liver, the liver from the brain, etc.—so we can say that Shiva is located in the gaps between the organs.

On a more subtle level, Shiva is located within each organ. The solid structure of an organ comprises cells with spaces between, and the cells also contain compartments that include empty space. So we see that Shiva is the space between organs, the space within organs, as well as the space between cells in the organs.

Cells are also constructed of molecules, which have spaces between them, and molecules are made out of atoms, which also have spaces, or gaps, between them. There are gaps between the nucleus and the different shells of the electrons within the atom, and by going more deeply we find that there is space between the elementary particles.

Progressing to yet finer levels, we ultimately arrive at the Unified Field—the fundamental constituent of all matter. On this level we find that everything is in a sense emptiness, for it is transcendental, beyond the forms and phenomena of the material universe. Everything is made of unbounded, eternal, self-referral consciousness, the reality of the silence of Shiva.

Even on a gross molecular and anatomic level, if we were to remove the empty spaces between atoms, molecules, and every particle of matter, the entire planet Earth along with everything on it could be put in a small cube less than 1 cm in dimension. This means that everything we see and touch is ultimately made of empty space.

It is important to remember that structure and form as we ordinarily know them are only an understanding of reality, which we create on the basis of our perceptual capacities. Our sense of vision, for example, is limited to wavelengths between 400 and 700 nanometres, and our hearing is limited to frequencies between 20 and 20,000 cycles per second, and yet there is an infinite range of wavelengths and frequencies in the universe. Thus it is only

the limitations of our eyes that restrict us to certain wavelengths of light, and the limitations of our ears that limit us to certain wavelengths of sound, and these determine how we perceive the universe.

Suppose that our eyes do not see light. The sensory receptors of the vestibular labyrinth (utricle and saccule), located within our ear, are actually sensitive to linear acceleration and changes of position of the head in the gravitational field. But suppose we had a sense of perception that is far more sensitive than this and could detect the slightest variations of the gravitational force. If we used this sense of perception to explore the space around Earth and the space between the Sun, the Moon, and the various planets of our solar system, we could directly perceive how the gravitational field pervades the entire solar system. So if we perceived only this aspect of reality, we would report from our experience (and not just from theoretical inference) that there is a field, the gravitational field, that pervades the solar system and connects the Sun, Moon, Earth, and all the planets.

The truth is that as we look deeper into any aspect of creation we find that it is nothing other than the Unified Field, which is available at every point. Only a perception, a point of view, causes us to see the universe the way we do—the reality of the universe is that it is pure, infinite, unbounded wakefulness.

So where is Shiva in our physiology? We find Shiva everywhere. We find Shiva to be everything, and to permeate the entire physiology. We can also say that Shiva is the space between my neighbour and me, because Shiva is empty space. Or if we examine the cellular level, or the atomic level, or even the level of the elementary particle, we find him to be permeating everything. Since Shiva is the silence between any two aspects of creation, he gives us the opportunity to see things as differentiated, in the sense that we can see a larger or a smaller space.

This perspective is found in Veda and the Vedic Literature, as we saw in the description of the gaps between the syllables in Maharishi's *Apaurusheya*



*Bhāshya* (see [Chapter I](#)). We see gaps between syllables, between *Pāda*, and we might say that there is an even bigger gap between *Richā*, and between *Sūkta* and *Maṇḍala*. But the reality is that everything is ultimately the gap, everything is the Unified Field—everything is the value of infinite peace and harmony that is Shiva, which we understand to be the basic and most fundamental value of creation.

As we continue examining the perception of difference and the process of manifestation from one infinite, unbounded Being into the multiplicity of creation, we understand that emptiness still exists, that silence, calm, and peace are all expressed in different dimensions of reality—dimensions of peace, dimensions of silence, and dimensions of emptiness. Intellectually we realize that this is an illusion, but certainly it is a reality in the waking state of consciousness. The basic reality of the manifest field is that it gives the impression of a bigger silence and a smaller silence even when we know that everything is silence.

## Vishṇu

Maharishi describes Vishṇu as infinite dynamism within silence. This quality expresses itself as the dynamic processes perpetually operating throughout the physiology in which change, reverberation, or transformation occurs.

The analysis of the name *Vishṇu* clearly demonstrates this quality of pervasive dynamism: *द्वि* (*Vi*) means ‘all pervasive’, *ष* (*Sha*) refers to the Transcendent, *ण* (*Na*) along with *उ* (*U*) refer to the negation of silence, the negation of the quality of Shiva, in a sense. Therefore Vishṇu is an infinitely dynamic, all-pervading quality of intelligence, with respect to the transcendental field of pure intelligence as well as to the dynamic processes within the physiology.

Dynamism is expressed in all levels of the physiology. Movement, speech, thought, and action are all dynamic. Dynamism is also expressed as all of the



**Figure 3.2 Traditional representation of Vishnu**

constantly changing processes underlying the functions of organs and their systems. The body is built on the process of homeostasis, which allows change to continually take place while simultaneously maintaining wholeness. The physiology is constantly transforming itself under laws that control the relationships between different cells and organs. These activities and transformations are expressions of dynamism—life is not static or stagnant.

On a fundamental level, physiological dynamism is found in the energy that underlies every aspect of function. Energy is required for motion, change, and transformation—from the atomic level, to the organs and their systems, and to the whole organism. When we look at a stone, for example, we can say that it is not dynamic, and from one perspective the stone is indeed quiet. But it is made of molecules, and the molecules are made of atoms, and at that level we find dynamic change. The electrons are orbiting the nucleus at extremely high speeds, only a few orders of magnitude below the speed of light, an almost infinite dynamics when compared to what we observe in everyday life. The perception of dynamism and silence in this case is relative, because even though the stone does not ‘normally’ appear to be dynamic, when seen from the deeper perspective of its true reality it is very dynamic, a constantly moving reality.

The dynamism of Vishnu is also expressed as the energy inherent within an atom or molecule’s structure. The movement of electrons surrounding the nuclei of atoms and molecules in quantum-mechanical orbitals is very dynamic. In fact, the energy stored in the dynamic configuration of electrons and nuclei at the molecular level is used for the supply of energy in the physiology.

Each dynamic configuration of electrons and nuclei at the molecular level has a corresponding energy, and the transition from one molecular configuration to another raises or lowers the level of energy. The most dramatic change of a molecular configuration takes place, of course, when a molecule splits into separate parts, or conversely when two molecules combine to form a new one. For example, the ATP molecule, which is the most prominent molecular carrier of energy in the physiology, can undergo a configurational change in which a group of a few atoms, called the phosphate group, is separated from the rest of the molecule, so that ATP is transformed into the smaller ADP. This process of transformation, which is usually controlled, or catalyzed, by enzymes, releases stored energy that in turn becomes available for physiological processes. Likewise, the reverse process—in which energy supply from metabolic processes and the presence of the biocatalyst ATP synthase causes the merging of ADP and a phosphate group to again form ATP—increases the energy level of the resulting ATP molecule, so that high-energetic ATP can serve again as a storage of energy, and the cycle can begin again.

The molecular transformations, with their characteristic configurational changes—such as the transformation of ATP charged with high energy into the less energetic ADP—follow specific laws of thermodynamics and chemistry on the molecular and cellular levels, and the release of energy due to these processes leads to further transformations in the form of biochemical processes, and are therefore the central source for the dynamic energy available in the physiology. In this way, the energy stored within the dynamic configurations at the atomic and molecular level, and its controlled release and utilization, allows the physiology to constantly rejuvenate and reconstruct itself.

Energy at the cellular level can be translated into energy at the organ level. For example, a moving muscle is made of fibres that slide against each other using energy involving an exchange of electrons, molecules, and ions. This results in a chemical reaction that pulls the fibres of the muscle together,

creating a contraction leading to, for example, the movement of a finger, arm, etc., or to the cycles of contraction and relaxation that enable the heart to distribute blood throughout the body.

The chemical reactions taking place on the cellular level are expressed in more complex activities on the organ level. For example, we see the liver digesting and storing nutrients and then releasing them into the blood so that they can be distributed throughout the body, which is an aspect of dynamism on the organ level.

Dynamism is also found in the outer activities of life, such as the fields of thinking, action, and decision-making. All these activities are based on the dynamic aspect of Creative Intelligence, which allows different functions to take place.

This quality of dynamism is present everywhere because an exchange of energy is always taking place at all levels—from the elementary particle and electron level to the grosser levels involving voluntary and involuntary movements of the body. And all the dynamism present in the physiology is the expression of Vishṇu, characterized by all the processes that lead to transformation, evolution, progress, change, and movement. Vishṇu is therefore present along with Shiva in every gap and in every cell, and on the structural level between cells.

A revealing characteristic found throughout the Vedic Literature is that Shiva and Vishṇu are truly devoted to each other—Shiva is totally devoted to Vishṇu and Vishṇu is totally devoted to Shiva. Shiva often exclaims that there is nothing dearer to him than Vishṇu, while Vishṇu expresses his feeling that there is nothing more precious to him than Shiva. This relationship describes the reality of self-referral consciousness: because Vishṇu and Shiva are the deepest aspects of reality, both *are* the Unified Field of Natural Law. Infinite silence is truly infinite dynamism, and infinite dynamism truly is infinite silence. Therefore they are both the reality at the basis of the entire universe, the reality at the basis of the Rāmāyaṇ, and the

reality at the basis of human physiology.

## Brahmā

Maharishi describes Brahmā as the Creator, the creative force within self-referral consciousness that unfolds the entire creation on the basis of the intelligence of Natural Law available within Shiva and Vishṇu. Brahmā is generally depicted holding the four Veda, for he is Veda in its entirety, the basis of the entire universe.

As we discussed in Chapter I, Maharishi's *Apaurusheya Bhāshya* describes Veda as the Constitution of the Universe, the fundamental level from which all the universal Laws of Nature emerge. Veda is therefore the most fundamental level of Natural Law, displaying individual Laws as the sequential unfoldment of structure and silence. Maharishi illustrates this principle with a verse from the Shrauta Sūtra, an aspect of the Vedic Literature:



Figure 3.2 Traditional

मन्त्रब्राह्मणयोर्द्वर्द्येदनामधेयम्

*Mantra Brāhmaṇayor-Veda nāmadheyam*  
(Āpastamba Shrauta Sūtra, 24.1.31)

*Mantra and Brāhmaṇa together constitute Veda.*

*Mantra*, Maharishi explains, is the structure of pure knowledge, the sounds of Veda, the vibrations, and *Brāhmaṇa* is the organizing power of *Mantra*, present in the gap between different *Mantra*. *Mantra* is sound and the gap between the sounds is silence. Together they are Veda.



**representation of Brahmā**      The entire Vedic Literature comprises these two components: syllables—the sounds—and the gaps between the syllables. The gaps that we find throughout Veda and the Vedic Literature are the locations for the transformation of one syllable into another, in which one syllable ‘collapses’ into silence, and a new syllable emerges.

From this analysis, we recognize three fundamental values of Veda: infinite silence as the gaps, infinite dynamism as the syllables, and the structural orderliness that guides the progression of gaps and syllables through their sequential expansion, culminating in the total structure of Veda and the Vedic Literature.

The Purāṇ describe how Brahmā created the universe by performing *Tapas*. *Tapas*, as Maharishi beautifully brings out, is in its most profound value the experience of Transcendental Consciousness, a return to the Self. Thus Brahmā came back to his own essential nature, made of Shiva and Vishṇu. All the structures of creation naturally emerged from this infinite silence and dynamism. Without Shiva and Vishṇu there can be neither silence nor dynamism, and without these qualities nothing can be created. Just as an architect holds the plans for a building but requires the energy of skilled, intelligent workers to create the structure, Brahmā maintained the blueprint of creation, but needed to return to the building blocks of Shiva and Vishṇu in order to unfold creation based on the ‘architectural plan’ of Veda.

On the most fundamental level of physiological consideration, Shiva is silence, Vishṇu is dynamism, and Brahmā is the collection of all the Laws of Nature that unfold silence and dynamism into structure and function.

### ***Footnotes***

1. Maharishi defines *Purusha* and *Prakṛiti* in the following way: ‘There are two qualities within the self-referral level of intelligence. These two qualities are distinguished by two names—*Purusha* and *Prakṛiti*. The intelligence within every grain of creation has the silent quality of intelligence (*Purusha*)



and the creative quality of intelligence (*Prakṛiti*) with reference to that particular grain of creation. Creative Intelligence is the active principle of pure intelligence. Pure intelligence is the silent quality, and Creative Intelligence is the dynamic nature latent within the silent quality awake in the nature of pure intelligence.’ (*Maharishi’s Absolute Theory of Government*, pp. 370–371)

2. Shiva, Viṣṇu, Brahmā, and their *Prakṛitis* each have many names. Indeed, it is a common practice in the Vedic Tradition to recite the 1000 names of Shiva and Viṣṇu, each name representing an aspect of the same reality.



## Chapter IV

### The *Prakṛiti* of Shiva, Viṣṇu, Brahmā

**V**iṣṇu and Shiva are the fundamental units of creation, but the design belongs to Brahmā. When Brahmā engages the building blocks they automatically unfold through the basic intelligence within them.

Once Shiva and Viṣṇu unfold they have in a sense changed, because they are essentially infinite silence and infinite dynamism, infinite energy and pure Being. So a new principle is required in order for them to manifest: *Prakṛiti*. *Prakṛiti* is the force that ultimately allows manifestation to take place.

The entire multiplicity of creation emerges from the Unified Field of Pure Consciousness, which is the ground upon which the Laws of Nature express themselves in all their multitudinous forms. Maharishi has described two fundamental qualities of this intelligence, which are known in the Vedic Language as *Purusha* and *Prakṛiti*. *Purusha* is the pure structure of knowledge, the silent quality that remains ever self-referral, maintaining the constancy of the non-changing value of consciousness. *Purusha* is all powerful because it is the power of Shiva, Viṣṇu, and Brahmā. *Prakṛiti* is as if separate from *Purusha*, yet embedded within it. It is through the organizing power of *Prakṛiti* that the manifestation and administration of all fields of action and experience take place.

The Bhagavad-Gītā, an aspect of the Vedic Literature, beautifully illustrates this principle in a famous verse in which Lord Kṛishṇa, the embodiment of Wholeness, describes how creation emerges from his own nature—*Prakṛiti*, the nature of *Brahm*:

प्रकृतिं रूढ्यामद्वयष्टभ्य द्विद्यसृजामि पुनः पुनः

*Prakṛitiṁ swām avashtabhya visṛijāmi punaḥ punaḥ*  
(*Bhagavad-Gītā*, 9.8)

*Curving back on my own Nature, I create again and again.*

Since Brahmā, Viṣṇu, and Shiva are each the embodiment of Totality—Brahmā in terms of the creative force, Viṣṇu in terms of dynamism, and Shiva in terms of silence—each has his own *Prakṛiti*.

### **The *Prakṛiti* of Shiva**

There are several different values of Shiva's *Prakṛiti*, which represent different aspects of the infinite manifestations of Shiva's qualities. Each has its own name, allowing it to be expressed with the appropriate reverberations of sound. Thus Shiva's *Prakṛiti* might be called Satī, Pārvatī, or Durgā depending on the level of expression. However, Shiva and his *Prakṛiti* are ultimately the same—everything is all Shiva, just as everything is all Viṣṇu and Brahmā, just as everything is ultimately one Unified Field.

In order to locate the different values of *Prakṛiti* in the physiology, let us first examine some basic principles. In our previous discussion we saw that human physiology is constructed of different organ systems, which comprise individual organs. The organs are solid aspects of the physiology, consisting of tissues and cells that in turn consist of molecules and atoms. These are the expressed aspects of the structures that collect to form human physiology.

Every organ has a specific structure: the heart has a certain shape, with four cavities called chambers, and the brain has its own structure, with four lobes and different divisions and subdivisions. The hand has five fingers, a palm, etc. In addition to structure, every organ and cell has a function. For example,

one of the heart's functions is to distribute blood to the different parts of the body.

Structure includes not only the material value of an organ or organ system, but also the gaps between organs. In fact, the gaps are as significant as the solid matter, and in a sense are even more basic and more important. Again examining the heart, we see that it is a solid structure that pumps blood to the different parts of the physiology. If we further consider, we find that the flow of blood takes place within the empty spaces that make up the four chambers of the heart.

Similarly, the heart's vessels, which are the arteries and veins extending throughout the body, are hollow tubes that convey the circulation of fluid. Again, it is within the gaps that the dynamic processes take place. The artery is a solid wall made of cells, but where is its true function taking place? In the gap, in the silent centre of the artery, through which the fluid is transported! In each case there is a solid structure that may perform a dynamic function, but this structure—which we see as a static reality—has space, or silence, within it, and this is the place where the real function of the structure is present.

This is not only true on the gross level of organs and organ systems, but also on the fine and finest levels of physiology and matter. The functioning of the nervous system, for example, has at its basis the exchange of information via the gaps between neurons called synapses (empty space between two neurons). The flow of electrical impulses along the axon of a neuron is based on the exchange of ions, an activity taking place through the pores (holes) of the neuron's membranes. Everywhere we look we see that function, activity, and dynamism take place in empty spaces. In fact this is to be expected: if you have dynamism you must have movement, and for movement to take place one particle, molecule, cell, organ, person, star, or galaxy must be able to go from one place to another. And this means that the new location must be empty to accommodate the new occupant, who in turn is vacating his

former place. This is movement, this is dynamism, which cannot exist without empty space. Empty space is silence, Shiva. Dynamism cannot be without silence, Vishṇu cannot be without Shiva.

To take another example of this relationship between matter and space let us consider the structure and function of a house. A house is made of walls and the walls are made of brick, or other material. The walls protect us and define the house, but where does the reality of the house truly exist? The reality of the house is not in its walls, but in the space within the house—we live in the silent structure that lies within the material structure, we go about our daily lives in the empty spaces in which we move and rest. This specific space that we call a house, however, is only a reality by virtue of the solid structures, such as the walls, roof, and floors. Otherwise it would be emptiness and flat unboundedness.

Space is space, whether it is called the space between galaxies or the space between organs. One space is called the bedroom of a house while another is called the living room; one is the space inside arteries while another is the space between molecules. However, through *Prakṛiti* space is captured, quantified, given a meaning, and assumes a function.

Thus *Prakṛiti* specifies, giving *Purusha* a quality. This understanding enables us to understand the *Prakṛiti* of Shiva known as Pārvatī,<sup>1</sup> Satī, or Durgā. Shiva is the silent reality at the basis of creation, and in the physiology he is the empty space. This space becomes a reality in the body through the collection of molecules that give shape to all of the structures.

The cell membranes are collections of molecules that allow the cells and the body as a whole to take a structure or a form rather than to remain a soup of molecules. Cell membranes give shape to all the structures of the body. A membrane is like a sheet of cloth made out of organic material and is mostly lipid—a bi-lipid layer with various protein, sugar, and mineral components.

Thus if we take the *Prakṛiti* of Shiva to be Pārvatī, and if we take Pārvatī to

be the body's membranes, from the cellular level to the organ level to the entire body—the skin level, including the fascia inside and around the different tissues along with everything that is holding the body together—then we have located the intimate relationship between gaps (silence) and the membranes that compartmentalise the gap (the *Prakṛiti* of silence) and give it structure. It is as if *Prakṛiti* captures a set of Laws of Nature by outlining a space, and then the space becomes the stage for specific functions. For example, the chambers of the heart with their very specific and precise structures become the stage of a lifetime activity—dispatching nourishment to the entire body.



**Figure 4.1 Traditional representation of Shiva and Pārvatī**

Looking again to our analogy of a house, we see that the compartments provide the interior with its structure and consequent unique features. Indeed, in a house that is designed according to the principles of Maharishi Sthāpatya Veda, in which the design of the structure is in tune with Natural Law, we find that specific Laws of Nature are lively in each room that determine the room's function. The function of a room is therefore profoundly defined by its structure. This principle of structure, in which particular aspects of Natural Law are expressed in specific boundaries, is similar to one found in human physiology: membranes throughout the body form the various boundaries of cells, tissues, organs, and organ systems in order to define both structure and function.

We will now examine the processes of development, differentiation, and growth within the physiology in terms of Shiva and his *Prakṛiti*, either Pārvatī or Satī.



Every cell is originally a non-differentiated stem cell. An embryo, for example, begins from a primordial cell that is a combination of two cells. All the millions of cells that constitute the whole physiology emerge from the division of this one primordial cell. As the many different cells continue to develop, they gain more specific characteristics and grow into fully committed, fully specialized cells that maintain different shapes, forms, and functions.

The original stem cell has the same structure, the same DNA, as every other stem cell, and therefore has a multi-potent field of possibilities. The stem cell differentiates according to the different requirements it senses from its immediate environment. As cells begin to interact through the gaps between them, they differentiate and specialize so that one cell may become a muscle cell, another a neuron, while another may become a liver cell, and yet another a kidney cell. All these potential developments are present within the original cell, but the specific, specialized cell unfolds on the basis of its DNA, which is the same in every cell but which guides the transformation of the cell according to messages from the environment. Gradually the cell begins to change, becoming sub-specialized into one of a variety of cells and tissues, eventually becoming fully committed to a specific type of functioning.

This complete commitment to a specific type enables the cell to perform a particular function from which it cannot, in most cases, return: a liver cell will always be a liver cell and will not change to a muscle cell.<sup>2</sup>

Satī is the original stem cell, the most fundamental aspect of the formation of any cell or organ. The silent DNA within the original stem cell keeps it as a non-differentiated pluripotent cell. The silence of the DNA is the silence of Shiva, which keeps the cell non-committed, non-dynamic, and having all possibilities. However, when a messenger or other stimulus induces the DNA to guide the cell to a differentiated form, the DNA assumes a dynamic role by opening its double helix and activating specific codons, leading to a transformation in the cell's structure and function.

There is a story in the Purāṇ that describes these mechanics. Satī's father, Daksha, received a garland from Jagadambikā (a Devī related to *Prakṛiti* with a worldly connection). The garland inspired Daksha to engage in a procreative activity, which shed impurities on the garland. As a result, the garland made Daksha hate Shiva and Satī. Daksha then conducted a *Yagya* but insulted Shiva and Satī by not inviting them. Satī nevertheless attended the *Yagya*, but was again insulted. Unable to bear the insult, she leapt into the fire.

The garland represents the double stranded helical DNA, which when opened looks like a garland. The procreative acts in which Daksha engaged are similar to the opening of the DNA and the coupling of its strands with various molecules through the influence of various stimuli (described in the Purāṇ as impurities). This means that there is a dynamic process of differentiation taking place. Therefore it is not possible for Shiva to be fully upheld: silence is now superseded by activity, dynamism. This is why Shiva was not involved in the *Yagya*—he was not welcome.

Satī was also not allowed to maintain herself as a stem cell—she had to sacrifice her status and allow the emergence of a specific differentiated cell. This is why she participated in the *Yagya* even though not welcome to remain as a stem cell. The result of the *Yagya* is that the stem cell, through the intricate metabolic-biochemical processes (the fire of the *Yagya*), loses its non-specific universal quality, and is therefore burnt in the fire of *Yagya*. This allows a new level of manifestation to emerge in a specific differentiated cell. It is interesting to note that the garland was given to Daksha by a Devī named *Jagad* (world) *Ambikā* (Devī). The intention from the beginning was to induce a transformation in the direction of creation and procreation.

Maharishi points out that Shiva's *Prakṛiti* is more transcendental and therefore more basic than the other *Prakṛiti*, known as Saraswatī, Durgā, and Lakshmī. Pārvatī, as Shiva's *Prakṛiti*, is more on the level of *Para*—the Transcendent. This more transcendental value is apparent in the expression of

Pārvatī in the physiology as the principle of structure. The membranes are the basis of all structures, and therefore Pārvatī corresponds to all possible structures. Thus Shiva's *Prakṛiti* has an underlying, omnipresent, permeating reality that is defined as all of the membranes that together form an infinite possibility of structure and transformation of structure. When we examine the *Prakṛiti* of Brahmā and Viṣṇu we will see that each maintains a specific form in the physiology, whereas Pārvatī, even as an expressed reality, has an all-permeating, transcendental quality.

We see the expression of Shiva's *Prakṛiti* in the names of both Satī and Pārvatī. When we look at the sounds that form the word *Pārvatī* we find the following: प (Pa) means 'to protect or guide'; र (Ra) refers to dynamism, in this case the dynamic functioning of the physiology; व (Va) means 'air', and therefore refers to the gaps; त (Ta) means 'bursting forth', where the emergence of the membranes continues; ई (Ī) means 'to continue, to spread' and also 'to manifest', indicating the continued expression of material formation. Thus Pārvatī performs the function of protecting the empty spaces and providing the structure for the growth and expansion of the physiology.

In the same way, Satī describes the stem cells: स (Sa) means 'air', referring to the gaps within the physiology, and also 'knowledge', describing the transcendental state, the field of pure knowledge (the total silent DNA within the stem cell); त (Ta) is again the springing forth or emergence of the differentiated cells from the stem cell, as the structure of the physiology begins to unfold; ई (Ī) means 'to continue, to spread', and also 'to manifest', indicating the continued expression of material formation.

Here we see the unfoldment of the physiology from a transcendental perspective, in which there is the principle, rather than the realization, of compartmentalisation. This principle of structure emerges from the quality of Pārvatī, while the structuring dynamics emerge from the *Prakṛiti* of Viṣṇu, which will compartmentalise different aspects of silence into the spaces in the

organs and all the structures of the body that perform physiological functions.

## **The *Prakṛiti* of Viṣṇu**

Viṣṇu is the infinite dynamism inherent within the Unified Field, which expresses itself as different values of energy and activity throughout the physiology. The *Prakṛiti* of Viṣṇu is known in the Vedic Literature as Lakshmī, who appears in the Rāmāyaṇa as Sītā, the *Prakṛiti* of Rām.

In order to properly understand the relationship between Viṣṇu and his *Prakṛiti*, we must consider both dynamism, energy, and its expressed value, function. Pure dynamism is pure potentiality, with infinite frequencies of vibration. It has its own laws and its own activity, and is expressed in the physiology, as in the universe, by function.

Just as Shiva is space, which is the same everywhere, energy is also the same everywhere. Yet when dynamism expresses itself as a particular function, it does so by taking on a special quality. For example, the function of a building may be to house people, but the building has many functions within it—the function of the living room is different from the function of the dining room—and therefore the different functions give a particular quality to the potentiality of infinite dynamism, which is now perceived through function. We can say, therefore, that function is an expressed aspect of pure dynamism.

The *Prakṛiti* of Viṣṇu assumes the role of maintaining specific functions for different evolutionary goals. For example, in the physiology we see that it sustains the heart's function of pumping blood to bring nourishment to every part of the body, it sustains the kidneys' function of excreting fluids and toxins, and it sustains the brain's function as the master switchboard and controller of the entire physiology. The brain has a number of divisions and subdivisions, each with its own function, and all these functions are the *Prakṛiti* of Viṣṇu. So Viṣṇu's *Prakṛiti* is dynamism, energy, and potentiality expressing themselves into specific functions. Just as Shiva's silence assumes form through his *Prakṛiti*, dynamism is expressed as function

through Vishṇu's *Prakṛiti*.

We have therefore defined four intimately related values that are distinct yet which exist within each other, inseparable but complementary. These four are silence (Shiva), dynamism (Vishṇu), structure (Pārvatī), and function (Lakshmī)<sup>3</sup>. These four qualities of intelligence are profoundly and intimately related, because silence and dynamism are one within the other, and dynamism has silence within it in the same way that silence has dynamism within it—Shiva is within Vishṇu, and Vishṇu is within Shiva. At the same time we see that the basis of structure is silence, while the basis of function is dynamism, and therefore structure and function are also profoundly and intimately related—a particular function is perfectly fulfilled only by a specific structure.



**Figure 4.2 Traditional representation of Lakshmī**

We know that an aeroplane has a structure allowing it to employ specific Laws of Nature that enable it to fly. Similarly, the brain has a structure that allows it to maintain control over the physiology—to move muscles, activate organs, and control organ functions. In this sense, structure is basically function and function is basically structure, even though in essence they are different realities. We might say that structure is the silent perspective, whereas function is the dynamic perspective.

Thus we understand that the reality of Shiva, Vishṇu, Pārvatī, and Lakshmī—as with the realities of all the fundamental values of Natural Law—is that they are inseparable as one unified field of Wholeness, one Totality. Different perspectives lead to different meanings, different expressions, and different

levels of manifestation, but all four are found within the one unbounded ocean of consciousness in motion.

Maharishi often cites a verse from Rk Veda that illustrates this understanding:

नद्धद्योद्ध नद्धद्यो भद्धद्यति जायद्धदुमानः

*Navo-Navo bhavati jāyamānah*  
(Rk Veda 10.85.19)

*In the process of transformation, or evolution, it is the Totality that is reborn again and again.*

It is a mistake of the intellect to separate any specific from its Wholeness, because it is the joy of Wholeness to have these illusions of creating itself in terms of infinite differences. But if the differences are perceived as being separate from Wholeness at any point, even on the level of understanding, then suffering, pain, and problems arise.

Let us consider some further examples that will enable us to better understand the relationship between Shiva and his *Prakṛiti* (*Purusha* and *Prakṛiti* from the perspective of silence), and Vishṇu and his *Prakṛiti* (*Purusha* and *Prakṛiti* from the perspective of dynamism).

The frame of an automobile defines the space within the automobile as it moves along the road. Similarly, an aeroplane also defines the space inside it as it flies through the air. As far as space is concerned, the space contained by the aeroplane is the same as the space contained by the car. Yet the structures of both the automobile and the aeroplane define their space in a specific manner in order to fulfil a particular function.

Let us see where the four values that we have just examined exist. In the automobile the empty space where the passengers sit is Shiva, the energy and



power used to construct and run the automobile is Vishṇu, the structure and body of the automobile is Pārvatī, and the function of transporting passengers is Lakshmī. If we look at these same principles in terms of a physiological structure such as the heart, we find that the empty space within the chambers is Shiva, the metabolic and muscular energy that sustain the heart's energy and dynamic qualities are Vishṇu, the physical structure of the muscles and other tissues is Pārvatī, and the function of the heart in sustaining blood, circulation, and nourishment is Lakshmī.

On the basis of this understanding of the *Prakṛiti* of Shiva and Vishṇu, we can now consider the *Prakṛiti* of Brahmā.

### **The *Prakṛiti* of Brahmā**

Brahmā is the third aspect of *Purusha*, and represents the knowledge and creative intelligence of the Unified Field of Natural Law. The *Prakṛiti* of Brahmā is the creative force, which ensures that every aspect of manifestation takes place in accordance with Natural Law. Brahmā's *Prakṛiti* is called Saraswatī.

In order for a car to run properly and fulfil its function it must obey certain physical and chemical laws, including those of gravity, combustion, energy utilization, etc. It must also itself be used purposefully to fulfil the goals of transportation, such as going to a meeting, going to school etc. For the heart to maintain blood circulation it must obey certain biological laws that allow it to function in a properly sequential manner, including electrical excitation and inhibition, metabolic energy producing processes, muscular mechanical properties, etc. The heart's proper functioning is



essential in order to live a healthy life and be able to achieve the purpose for which one is born, to gain enlightenment and live

in bliss. All these design-related, goal-related, and evolutionarily-purposeful values are Brahmā and Saraswatī. All these Laws of Nature are found within the pure knowledge of Brahmā. Their applied, manifest expressions, which maintain order throughout creation, are Saraswatī, Brahmā's *Prakṛiti*. We can therefore add two additional values to the four mentioned earlier, which are knowledge, Brahmā, and its organizing power, Saraswatī.

### **Figure 4.3 Traditional representation of Saraswatī**

## **The *Prakṛiti* of Shiva, Vishṇu, and Brahmā in the Tissues**

We saw in Chapter I how the one unbounded, unmanifest field of Natural Law expresses itself as the infinite diversity of creation, while always maintaining itself and every level of its expression as one Unified Field. For diversity to emerge from Unity a process of differentiation takes place. Maharishi explains this process in terms of a concept known as *Pragyāparādh*, or 'the mistake of the intellect', a characteristic of the intellect in which one separates diversity from Unity and therefore perceives in terms of differences, to the exclusion of Wholeness.

We have just analysed the reality of creation in terms of six values: Shiva (silence), Vishṇu (dynamism), Brahmā (knowledge), Pārvatī (structure), Lakshmī (function), and Saraswatī (the organizing power of knowledge). If we were to see these values as separate, divided, or independent of each other, we would be suffering from the effect of *Pragyāparādh*, the mistake of the intellect. In Unity Consciousness, however, everything is seen in terms of the one unified Self.

Yet these values do express themselves differently, and even manifest themselves at different levels. The most subtle level of their reality is the

unmanifest Unified Field of Natural Law. The next level is in the abstract principles of Natural Law, such as silence, dynamism, knowledge, structure, function, and the organizing power of knowledge. Another more expressed level can be seen in human physiology in terms of DNA, cells, tissues, and organs. They are also expressed in the structures and functions of societies, nations, the world, and the whole universe. That is why we can say that Lakshmī, for example, is the pure, unmanifest, unbounded, infinite Unified Field of Natural Law, while at the same time we can say that Lakshmī is the principle of function. And on the cellular level she is the red blood cells, on the tissue level she is mesodermal tissue, on the organ level she is the heart, and on the social level she is wealth, health, and prosperity.

We have seen that Wholeness is contained in every stage of the sequential unfoldment of Veda, and how each successive sound and group of sounds contains all forty branches of Veda and the Vedic Literature. In the discussion of human physiology as the expression of Veda and the Vedic Literature we explored the application of this principle by locating all forty branches of Veda and the Vedic Literature in the DNA, in the cell, and in the entire physiology.<sup>4</sup>

This principle is also true for the *Devatās*, which can be found in every level of human physiology.<sup>5</sup>

Thus even though we have previously discussed Shiva's *Prakṛiti* as the reality of structure, Vishṇu's *Prakṛiti* as the reality of function, and Brahmā's *Prakṛiti* as the reality of the structuring intelligence that provides the overall plan, we can also understand these three qualities of intelligence in terms of other, more expressed values of the physiology. The subtlest of these, *Prakṛiti*, is on the level of the Unified Field, the pure field of Being. It is from the Unified Field that these qualities begin to express themselves, first as the principles of structure, function, and organizing intelligence, and subsequently in increasingly more concrete values. In this light, we can now examine other expressions of *Prakṛiti* in the physiology.

## **Saraswatī Is the Ectodermal Tissues**

We discussed previously the manner in which stem cells begin specialising into three fundamental types of cells that are the basis of different tissues. These are the ectodermal cells (the cells of the nervous system, including the brain, spinal cord, and nerves, as well as the skin), the endodermal cells (cells of the lungs, thyroid gland, pancreas, thymus, liver, intestines, and digestive tract), and the mesodermal cells (cells of the muscles, bone, heart, arteries, and veins).

The sensory system is made of ectodermal tissue. The sensory system enables us to gain knowledge about our own physiology by allowing us to consciously or unconsciously detect changes within the physiology in order to fulfil desires and needs, and to respond appropriately to environmental changes. The skin also covers and protects the body and contains nerve terminals and receptors that allow us to experience through touch, thus providing knowledge that is essential for our daily activities. Therefore Saraswatī, who embodies the organizing intelligence of knowledge, corresponds to ectodermal tissue.

## **Lakshmī Is the Mesodermal Tissues**

The mesodermal tissues that form the arteries and veins, the heart, muscles, and bone correspond to Lakshmī, Vishṇu's *Prakṛiti*. Lakshmī is the quality that provides health, wholeness, nourishment, and wealth. The heart, where Lakshmī resides, is a vital, dynamic, reverberating element of the physiology that distributes nourishment and vitality to the entire body through the arteries and veins.

## **Durgā Is the Endodermal Tissues**

The third type of tissue is called endodermal tissues, which make up the lungs, thyroid gland, digestive system, immune system, and the thymus. Endodermal tissues correspond to Shiva's

*Prakṛiti*, which in this case is a more expressed value with the name Durgā. Durgā is the quality of power and energy. She removes obstacles to the evolutionary process and transforms one state to another. All of the organs to which she corresponds are very powerful, and bring energy and strength to the entire physiology. In the digestive system, food particles are reduced to their basic components, which are then made into the constituents of the body. They are metabolised through processes of catabolism and anabolism, which is analogous to destruction and rebuilding.

The immune system protects the body and destroys foreign materials. All these can be found in the descriptions of Durgā's actions.



**Figure 4.4 Traditional representation of Durgā**

In some interpretations Shiva is also described as a destroyer and evolver.<sup>6</sup> Shiva brings back to silence any aspect of manifestation. He is the principle of least action and the reason that everything in Nature tends to go to its least excited state. If everything was left only to the Shiva aspect of Natural Law, and there was neither the aspect of Vishṇu nor Brahmā, all creation would collapse into a black hole, dark matter and infinite flatness—an absolute with nothing but silence. This is why Shiva is seen as the destroyer among the three basic principles in Nature, and why his *Prakṛiti* performs those corresponding functions on various levels of the observed universe.

We have now seen how the three values of *Prakṛiti*, also known in the Vedic Literature as the three aspects of Mother Divine, express themselves on two levels of physiological organization, first as physiological principles and then as the tissues. As the physiology develops, these values continue to express themselves, and thus the endodermal, ectodermal, and mesodermal tissues become increasingly differentiated and commit themselves to muscular



tissue, lung tissue, brain tissue, etc.

## **Saraswatī, Lakshmī, and Durgā in Other Aspects of the Physiology**

In *Human Physiology: Expression of Veda and the Vedic Literature*, we described Saraswatī as the brain, explaining that her four arms correspond to the four lobes of the brain. We now understand that this analysis does not contradict our discussion of her as ectodermal tissue. Similarly, the centre of Lakshmī is in the heart, which is the centre of all the dynamism of the structures of the mesodermal tissues, and therefore we see that she is on one hand the mesodermal tissue, and on another more expressed and committed level she is the heart. On this level, the four chambers of the heart correspond to Lakshmī's four arms.

We also described Durgā as the sacrum, which is situated in the lower abdominal portion of the sacral area. The sacrum is the centre of glandular activities and of all the body's energy. The sacrum has eight nerves that correspond to Durgā's eight arms.<sup>7</sup>

This description of Durgā does not preclude locating her in the other tissues of the body and different levels of the physiology, and similarly does not exclude us from locating Saraswatī and Lakshmī in other parts of the body. If we examine the blood, for example, we find that it consists of plasma, red blood cells, and white blood cells.

### **Saraswatī, Lakshmī, and Durgā in the blood:**

1. The red blood cells, which carry oxygen and give vitality and life to all aspects of the physiology, correspond to Lakshmī. Oxygen is highly important in the transformation of calories into energy, and therefore this level of energy is a great source of wealth, strength, and proper functioning. It is thus appropriately associated with Lakshmī. The rounded, coin-like cells of the blood correspond to Lakshmī's gold



coins. Lakshmī is usually depicted on a lotus (see [figure 4.2](#)), and when examined upside down the heart resembles a lotus.

2. Plasma, which carries all information and knowledge about physiological activities in the form of hormones and neurotransmitters, corresponds to Saraswatī, who is the power of knowledge. The heartbeat is activated by nerve fibres that form structures resembling a musical instrument, thus corresponding to Saraswatī's Vīṇā (see [figure 4.3](#)).

We will see that the descriptions of Saraswatī, Lakshmī, and Durgā enable us to locate structures in the physiology that correspond to various levels of their reality.

3. The third aspect of the blood is the white blood cells, which protect the body from invaders. These correspond to Durgā. The eight hands of Durgā correspond to the eight types of white cells in the blood, and the heart's powerful expulsion of the blood creates a sound like the roar of Durgā's lion (see [figure 4.4](#)).

Now we have covered Shiva, Vishṇu, Brahmā, Pārvatī, Durgā, Lakshmī, and Saraswatī in different levels of their expression, from the unmanifest, to the level of the principles of functioning, to the level of the sound vibration of their names—including their thousand different names and the levels of their physiological expressions.

## **The Experience of the Principal *Devatās* and Their *Prakṛiti* in Daily Life**

The reality of Shiva, Viṣṇu, Brahmā, Durgā, Lakshmī, and Saraswatī can be lived in daily life, and can be clearly illustrated in situations that bring us joy and fulfilment. We may remember moments when we stood in front of an ancient monument, or in a beautiful place of worship, or in any quiet, peaceful place free from activity and pollution. At such times we may feel a sense of awe and respect for the beauty or silence, and we might even feel that time has paused, or that our own breathing has almost stopped, and that silence is all pervading and powerful. This experience of silence is the experience of Shiva. It may not be the fullness of Shiva, which is unbounded, infinite silence, but it is nonetheless a quality of Shiva.

Shiva is omnipresent. Whether we are aware of him or not, he is within us and all around us at every moment in our life. He is present in the internal structures and functions of the body, and he is the infinite silence that underlies and supports all aspects of the universe. And yet we see that the experience of certain places of beauty, the experience of certain places of Natural Law, can evoke a great feeling of silence, dignity, and divinity, which is the experience of Shiva.

The physiological structures at the basis of our experience, which are the means by which the experience is given to us, are the structures that allow Shiva to be experienced in our consciousness. These structures are the value of Pārvatī. Pārvatī gives the ability to experience silence within the relative, expressed field of Natural Law.

Pārvatī is unmanifest in her essential nature because she is one with Shiva, and yet she is the force that allows the existence and maintenance of the structures, and the reality of the experience of Shiva, in the field of the changing relative. From the structure we can experience the silence of Shiva,

which connects Shiva to his expression in the relative fields.

If we listen to the sound of a symphony or a beautiful piece of music and enjoy its orderly expressions and sequences, it is natural for a sense of joy, harmony, and beauty to arise within us. This creative appreciation of harmony and music comes from the creativity of Brahmā. The creative intelligence of Brahmā expressing itself through the dynamic values of the musical sounds in their sequential order is Saraswatī, the *Prakṛiti* of Brahmā. Our inner joy in the silence of the experience of creativity and harmony—that abstract pure basis of the logic in which the music was constructed—is Brahmā. The outer experience of the music, the sound and melodies that we joyously experience on a conscious level, is the experience of Saraswatī.

Another expression of Brahmā and Saraswatī is found in the process of learning. In the study of any subject, whether academic or practical, we may experience a sense of awe, or a grand feeling of joy and appreciation when we comprehend something new—the experience of ‘yes, I understand’ or ‘now I know’ or the ‘aha’ exclamation of the scientist discovering a new principle or phenomenon. This revelation of knowledge is also a revelation of Brahmā on the level of our conscious awareness.

Brahmā is the custodian of Total Knowledge, and whenever we have a beautiful experience of happiness, inner understanding, or achievement from the revelation of a certain value of Natural Law in the perfection of its logic, or even when we simply learn something that we did not know before—perhaps something that we had desired to know—it is the experience of Brahmā. The experience of Brahmā is by means of Saraswatī’s expression of knowledge from the elements of knowledge, which express the quality of Saraswatī’s beauty in terms of knowledge.

The joy or bubbling bliss that we feel when we experience the dynamism of Natural Law—such as the wind blowing through the trees or the sight and sounds of the ocean—is an expression of the dynamic qualities of Viṣṇu through his *Prakṛiti*, Lakshmī.

This realization of beauty is in itself the expression of Vishṇu, but it is experienced through his *Prakṛiti*, which is the reason that Lakshmī is everything that is beautiful, healthy, wholeness, and full of richness.

As we can see from this analysis, we constantly have the opportunity to experience the values of Shiva, Vishṇu, Brahmā, and their *Prakṛiti* in our everyday life. It is very fortunate that his Holiness Maharishi Mahesh Yogi, coming from the Vedic Tradition of Masters and having the blessings of his master Shrī Guru Dev, has given the world the simple, natural, effortless technology of Transcendental Meditation and the TM-Sidhi programme, which allow everyone to go within themselves and experience the values that are the true inner Self of everyone and everything in life.

We have seen how the mind settles down during Transcendental Meditation and experiences pure consciousness, pure Being. Even those who are just beginning their practice notice a feeling of inner silence and quietness, a sense of inner purity. That silence is the experience of Shiva and his *Prakṛiti*, Pārvatī, together with all the power that this profound silence gives, and the energy that comes from Shiva's *Prakṛiti* named Durgā.

Concurrent with the experience of deep silence, one often enjoys a sense of all-knowingness, even in the early days of meditation. As we continue the practice of Transcendental Meditation we feel greater knowledge, greater support of Nature, greater attunement with Natural Law. These experiences of sudden expressions of knowledge and inner satisfaction from the fulfilment of that knowledge are the experience of Brahmā and Saraswatī, and are available within every one of us.

Those who practise Maharishi's Transcendental Meditation find that they experience greater happiness, better health, and a greater radiance of beauty and bliss within themselves in their daily life, along with the increasing ability to appreciate the outer values of life. These are also the expressions of Vishṇu and Lakshmī emanating from within, expressing themselves in the surface value of living.

Maharishi's Transcendental Meditation is a simple technique that can enliven the total potential of Natural Law in the fundamental values of life within each of us. These are enlivened during the few minutes of meditation, and become so full and stable as experience progresses that we are able to enjoy our environment more, enjoy our life more, our daily activity more. Within our awakened inner Self we begin to see the fundamental values of Natural Law.

In this way, Maharishi's Vedic Knowledge gives us a complete theoretical understanding of Natural Law together with a technology that allows us to experience in daily living what previously could only be understood intellectually. As the experience of meditation grows and higher states of consciousness spontaneously unfold, all these values become experienced as a permanent reality in every field of undertaking and at every level of perception and action. For this to transpire, the total brain must be developed and the whole physiology awakened.

Maharishi has given to the world the knowledge of perfection, a system of knowledge that comprehends everything in creation from the level of unbounded, infinite Being, always in harmony with every other field in creation. Maharishi's Global Country of World Peace was founded to create Rām Rāj, a kingdom of Rām, which means a kingdom of Wholeness, the kingdom in which Heaven is the reality of life on Earth. Maharishi worked tirelessly to bring this reality to our awareness on every level of experience—on the level of the intellect, on the level of feeling, on the level of understanding, and in every field of undertaking. This is the gift of Maharishi through Guru Dev and the Holy Tradition.

### ***Footnotes***

1. Pārvatī is the more transcendental value of Shiva's *Prakṛiti*, and is therefore more fundamental than the other aspects.

2. There are cells in the body that remain stem cells, maintaining all possibilities of differentiation.

Other cells have various levels of potential to change and adapt.

3. Lakshmī here is synonymous with Mahālakshmī. See [Chapter 20](#).

4. See *Human Physiology: Expression of Veda and the Vedic Literature*.

5. Ibid., Chapter XI.

6. Shiva is also referred to as the evolver because he enables one state to be destroyed, or annihilated, so that a new state can evolve. Maharishi explains that when a person moves from one place to another, he can be described as either destroying the reality of the old place or else as creating the new place: seen from the past, the first state has been destroyed, but seen from the future something new has evolved. This process of evolution takes place through the quality of Shiva.

7. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 375–377.





## **Section II:**

# **The Rāmāyaṇ in the Physiology**

# Chapter V

## The Principal Characters of the Rāmāyaṇ and their Physiological Roles

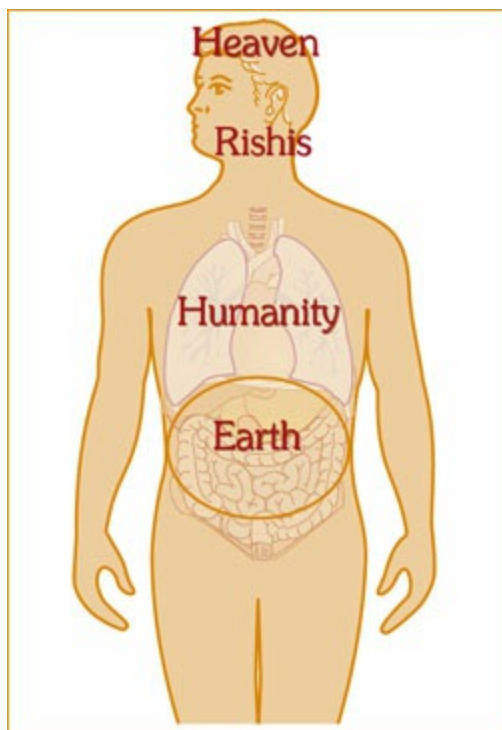
In the previous two chapters we saw how the principal *Devatās*—Brahmā, Viṣṇu, Shiva, and their *Prakṛiti*—are expressed in the physiology, and how their activities and relationships correspond to specific functions. In this chapter we will continue our examination of different characters from the Rāmāyaṇ and their location in the physiology, with respect to both their characteristics as well as their behaviour and activities. We will also see how these beings and characters—with all the complexity and scope of their emotions—perfectly describe Natural Law and how it expresses itself into human physiology.

We will consider the main characters, such as Rām and Sītā, as a well as many *Devatās*, who participate in Rām’s story. We will also see how many characters, such as the *Ṛishis*, mothers, brothers, and others, engage in behaviour that is clearly positive—in accord with Natural Law—while others perform activities that appear destructive, but which in reality are helpful to evolutionary processes. And we will see that all of them represent distinct elements of our own physiology.

Let us now examine elements of the body’s structure, so that we can better understand some of the characters within the Rāmāyaṇ and their interactions.

### Basic Elements of the Structure of Human Physiology

In figure 5.1 we see the simple structure of the physiology, with the head and neck, chest and abdominal area, and extremities. Above the umbilicus and below the chest there is a dome-like structure called the diaphragm, which separates the upper body from the lower



**Figure 5.1 Elements of the Rāmāyaṇ and human physiology**

body. Above the diaphragm sits the heart, and around the heart are the lungs and arms. Below the diaphragm is a cavity containing the basic organs of digestion and metabolism, including the liver, spleen, pancreas, stomach, different parts of the intestine, and other structures involved in basic sustaining functions.

To locate our first correspondence between the Rāmāyaṇ and human physiology we can examine the spherical structure of the ‘dome’ of the diaphragm and its continuation into the internal sac, called the peritoneum, which contains the organs of digestion. In our comparative analysis this corresponds to the planet Earth. On top of this spherical structure—the Earth—is another area that

includes the heart, lungs, and upper extremities. In this area we can locate what we call ‘humanity’, which includes all the sentient beings described in the Rāmāyaṇ, such as birds, humans, and other creatures possessing a mixture of human, animal, or divine characteristics.

The next higher area is transitional, extending from the upper arms to the neck and base of the head. This is the seat of the *Rishis*. Above this transitional area are the upper parts of the brain corresponding to Heaven, which contains supernatural beings such as the *Devatās* as well as other powers of Natural Law.

As we examine figure 5.1 we notice that the *Rishis* are sitting in the middle, between Heaven and Earth. The *Rishis* are responsible for ensuring that life on Earth is in accord with life in Heaven; they bring Heaven to Earth and make certain that every relationship is maintained in accordance with the

highest level of the expressions of Natural Law.

Now we can begin to explore these aspects of the Rāmāyaṇ and see how they and their interactions can be located in the physiology.

### ***Devatās***

*Devatās* are the Laws of Nature with specific administrative functions, which provide for the creation, maintenance, and dissolution of the entire universe. They are the administrators of every aspect of creation, organizing and maintaining it in perfect order.

The *Devatās* are not separate from the ultimate reality of the Self, Ātmā, the Unified Field of Natural Law. Just as every point of creation is, in its fundamental reality, the Unified Field, the *Devatās* also are ultimately the Unified Field. And they are present in human physiology—every *Devatā*, such as Shiva, Viṣṇu and Brahmā, embodies a particular quality of the physiology that manifests in specific structures and functions.

In the Rāmāyaṇ, the *Devatās* often appear as incarnations. Rām, for example, is the incarnation of Viṣṇu, and Sītā is the incarnation of Lakshmī. As human incarnations they play specific roles within the context of their characteristic administrative qualities. In the physiology, Rām is located in the neo-cortex of the human brain, particularly in the sensory-motor areas, which are associated with Heaven. Although Viṣṇu incarnates as a human being—as Rām on Earth—he remains a heavenly being even in this incarnation.

## ***Rākshasas***

Throughout the Rāmāyaṇ we encounter negative or destructive forces known as *Rākshasas*. The king of *Rākshasas*, whom we will examine in detail in Chapter XV, is Rāvaṇ, and it was his abduction of Sītā that led to his confrontation with Rām. In the physiology, *Rākshasas* correspond to anomalies, or stress, that give rise to disease or improper functioning.

In different parts of the Vedic Literature there are stories of highly refined beings who were cursed in one lifetime to become a *Rākshasa* in another. This corresponds to a healthy physiological structure that suddenly begins to function abnormally—in a destructive manner—thus losing its beneficial and evolutionary influence for the whole system. Some stories relate the previous life of a *Rākshasa*, which provides us with a clue to its location in the physiology, thus revealing both its normal and abnormal functioning.

A disease process can be the emergence of a toxic effect, perhaps stemming from the ingestion of improper food or from an abnormal transformation, such as a normal cell that has become cancerous. These also correspond to *Rākshasas*. However, anomalies in the physiology can be corrected, and factors that lead to imbalance can be normalized. Weak or inactive aspects of the physiology can be stimulated and awakened. The entire physiological activity can be brought back to be in harmony with total Natural Law. This full awakening on the physiological level leads to total brain development, perfect health, enlightenment, and perfection in life. The story of the Rāmāyaṇ is the story of Rām correcting anomalies and upholding positivity, harmony, balance, and all that is good, e.g., destroying the *Rākshasas* and strengthening the *Rishis* and their ability to perform their functions so that life is lived in tune with Natural Law.

## ***Rishis***

*Rishis* are the custodians of knowledge, who guide and teach the people,

especially the rulers and kings. They are responsible for ensuring that the Vedic Performances (*Yagya*) are lively in human awareness, and that all activities of life are evolutionary. *Rishis* are often found in the palaces of kings, providing wisdom and performing *Yagya*. And as we will see in subsequent chapters, they played a critical role in Rām's education and training as well as in guiding King Dasharath.

The Vedic Literature describes many *Rishis*, seven of whom have special significance. These are the *Sapta Rishis*,<sup>1</sup> who are associated with the Big Dipper or the great bear, Ursa Major.<sup>2</sup> The *Rishis* play a highly significant role in Vedic Society and thus correspond to very important structures in the body. In *Human Physiology: Expression of Veda and the Vedic Literature*, we located the *Sapta Rishis* in the seven longitudinal columns of the brainstem. We also located the palace of Chakravartī, the ruler of the universe, as the brainstem. The presence of the *Rishis* in this area of the nervous system reveals their essential role as custodians of knowledge, which is the basis of supreme rulership. To a great extent the *Rishis* represent holistic modes of functioning, which maintain the entire physiology in tune with Natural Law.

The *Rishis* have an integrating role in society, and therefore they correspond to integrating structures, such as the association fibres of the nervous system, which connect different parts of the cortex with different parts of the brain. These types of structures fulfil the *Rishis*' role of integrating, guiding, and giving out knowledge as they connect lower level activity with higher levels, and help connect the individual with the cosmos and with his own cosmic nature.



## Kings

Many different kings appear throughout the Rāmāyaṇ, with different levels of responsibility and types of behaviour. The behaviour of a king can either be evolutionary or non-evolutionary, depending on whether his activities are life supporting, as in the case of Dasharath and Janaka, or damaging to life, as in the case of the *Rākshasa* kings.

A king always corresponds to a physiological structure or function that has command over an area. Physiological activities that take place in a small area correspond to warriors or chiefs of lesser significance, whereas physiological entities controlling larger functions correspond to more powerful kings.

The weapons of the kings correspond to nerve impulses, or other types of transmitters, which move quickly throughout the nervous system. The instructions sent to the nervous system via the nerves either from the brain or from other parts of the physiology are like arrows shot in order to vanquish an enemy. These impulses are controlled by the areas of the brain that rule different physiological functions, and therefore correspond to the rulership of a king. These areas can activate either the firing of neurons or the secretion of hormones.

Just as each king communicates through his own local language, the physiology employs different languages, or messages. For example, when a nerve relays a message to a specific part of the body it employs biochemical messengers called neurotransmitters. These transmitters have different shapes and different effects. Thus we find areas of the brain that utilize specific types of neurotransmitters to control particular kinds of structures. When a neuron secretes its neurotransmitter, the structure that responds does so in a very specific way. This is like a king giving orders to his subjects. The neurotransmitters are therefore like the language used between a king and his subjects.

## **Animals, Plants, and Inanimate Objects**

In the Rāmāyaṇ different types of animals participate in the stories and events. Most have supernormal characteristics, are able to communicate through speech, and often possess the ability to perform magical feats. Some are described as incarnations of *Devatās*, though they generally perform services and assume supportive roles to other prominent characters. As we shall see later, animals described in the Rāmāyaṇ correspond to structures that play supportive and service-oriented roles, such as carriers and messengers that move between different parts of the body.

The Rāmāyaṇ also describes various plants, inanimate objects, and geographical locations. Included are the names of forests where Rām dwelt, trees under which he sat, lakes and rivers he crossed, as well as bows and arrows, caves, mountains, stones, etc. All these correspond to specific physiological structures. For example, some forests correspond to nerve tissues with tree-like structures. The bodies of water, such as the ocean surrounding Lankā as well as the Sarayu river, correspond to specific fluids and their movements. Bridges extending over these bodies of water describe tissues that pass across the fluids. Caves represent hidden and protected places in the body, often deep inside bones or organs. Similarly, the Himālayas correspond to the gyri and sulci of the cortical layers, which visually resemble mountains and valleys.

## **Relationships, Feelings, Emotions, Boons, and Curses**

As we examine the different characters of the Rāmāyaṇ, we will not only discuss their physiological counterparts but also the counterparts of their relationships with each other. For example, in the relationship between a king and his son we will find elements that define the relationship between their corresponding physiological parts.

Similarly, female characters correspond to the nourishing power available in the circulatory system. The arteries distribute nourishment and information, and play a powerful role in the sustenance of the entire physiology. If we examine the concept of ‘mother’, we find that a mother represents the nourishing quality—the value that brings nutrition, fullness, education, and protection to her children—and thus ‘mother’ and ‘sister’ are connected to the arterial system, which is a main source of nourishment through the blood. The venous system transports toxins and impurities that have been cleansed from the body, and therefore resembles a servant through whom everything becomes purified.

The male characters mostly perform functions that are available in the organs and organ systems, and therefore when we read of a mother and her sons we can locate a specific artery nourishing a specific physiological area where the son is located. Similarly, references to brothers or sisters correspond to a connection between two structures. For example, two sisters may correspond to two arteries branching from the same trunk. In this we can find a relationship between two structures in the body that is like the relationship between brother and sister, either by virtue of proximity or similarity in function.

Interactions between various parts of the physiology follow specific laws of biology. The characteristics of these interactions are nevertheless varied. In some cases two parts might work in a cooperative way, such as the reduction of blood sugar concentration, while others may work in a seemingly antagonistic way, as do the sympathetic and parasympathetic nervous systems. When stimulated, the sympathetic system leads to an increase in heart rate, whereas the parasympathetic system works to slow the heart. In addition, some aspects of the physiology have attractive tendencies, such as a particular hormone that attracts the growth of blood vessels in an area. Other aspects may have repulsive tendencies. These values of inhibition, excitation, cooperation, antagonism, attraction, and repulsion are the counterparts of events that occur in the Rāmāyaṇ. When described in terms of human

relationships, they assume the characteristics or qualities of feelings and governing emotions, including dedication, self-sacrifice, etc. These qualities are also seen in specific modes of physiological activity: when a white blood cell circulating in the body attacks a virus, bacteria, or any foreign body, it does so with full commitment or dedication, and even with self-sacrifice when needed.

In the Vedic Literature we find that boons are granted as rewards for good actions and curses are inflicted as punishments. Curses and boons are the expressions of *Karma*—the law of action and reaction—and are realities taking place in the physiology. Boons represent positive results of actions, while curses are the negative results. The human physiology obeys the laws of action and reaction, and the boons are processes that strengthen and reinforce specific structures or types of physiological activity leading to more ideal functioning. A curse is therefore a process through which a structure or a specific function is inhibited in its growth or strength, or even transformed into a physiological anomaly such as cancer.

Results of our past actions take on different dimensions throughout the course of our evolution until they are completely purified and eliminated, and our physiology functions in accord with Natural Law. In this highest state of development every stress and strain has been eliminated and every structure and function reflects the sequential unfoldment of Veda.

This is the general basis for our determination of the classification of the characters, personalities, and activities of the Rāmāyaṇ in terms of human physiology. As every individual goes through different phases of personal evolution facing the situations and circumstances of daily life—including the considerations of both health and disease—we can infer that they are experiencing the Rāmāyaṇ within their own physiologies.

### ***Footnotes***

1. *Sapta* means ‘seven’ in Sanskrit.

2. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 379–382.



## Chapter VI

### *Bāl Kāṇḍ, Sarga 1–7*

We have seen that the Rāmāyaṇ is the story of life—the story of how all the Laws of Nature construct and conduct the activities of everything throughout the universe, especially the growth and evolution of the structure and function of the human physiology. We have further seen how the display of the Rāmāyaṇ in the physiology includes the physical level of the structures of the nerves, fibres, muscles, and organs.

The Rāmāyaṇ has been recounted in three main sources: the Vālmīki Rāmāyaṇ, the Rām Charit Mānasa of Tulsīdās, and the Yoga Vasishtha of Vālmīki. For this study we will use Vālmīki’s Rāmāyaṇ as our main reference. We will also use complementary details and narratives from the other versions of the Rāmāyaṇ, as well as from the Purāṇ and different aspects of the Vedic Literature, to clarify either the origin or characteristics of some of the characters mentioned by Vālmīki. These characters, as we shall see, require a more detailed examination in order to locate appropriate physiological counterparts.

The Vālmīki Rāmāyaṇ is divided into seven *Kāṇḍas*, or chapters, each of which is divided into subdivisions called *sarga*.<sup>1</sup>

The names of the *Kāṇḍa* are:

- *Bāl Kāṇḍ* (the chapter on Rām’s youth)
- *Ayodhyā Kāṇḍ* (the chapter taking place in Ayodhyā, the capital city)
- *Āraṇya Kāṇḍ* (the forest chapter—the first part of Rām’s exile)
- *Kishkindhā Kāṇḍ* (the chapter describing events in the land called Kishkindhā)
- *Sundar Kāṇḍ* (the ‘beautiful chapter’, in which Hanumān locates Sītā in



Lankā)

- *Yuddha Kāṇḍ* (the chapter on the great battle)
- *Uttar Kāṇḍ* (the final chapter)

Our study will follow this structure, beginning with the first chapter, the *Bāl Kāṇḍ*, and proceeding through each *sarga* of each Kāṇḍ. In some cases we will examine a *sarga* in detail, while in other instances we will summarize events that occurred over the course of several *sarga*.

### ***Sarga 1: Summary of the Entire Rāmāyaṇ***

The first chapter describes Rām's birth and provides the significant events of his early days, and is thus appropriately called *Bāl Kāṇḍ*, the 'Chapter on Childhood'. The first *sarga* of the *Bāl Kāṇḍ* is a summary of the entire Rāmāyaṇ, which we have included as Appendix I for those not familiar with the story. The story opens with Vālmīki's enquiry to Ṛishi Nārada as to whether a leader exists in the world who is endowed with the highest qualities of character and strength. Nārada recalls Rām and relates his greatness, enumerating his many exemplary qualities. In verse 12, for example, Nārada explains that Rām is the embodiment of knowledge, who knows everything and thinks and acts according to *Dharma* (Natural Law) in order to bring balance to any situation he faces:

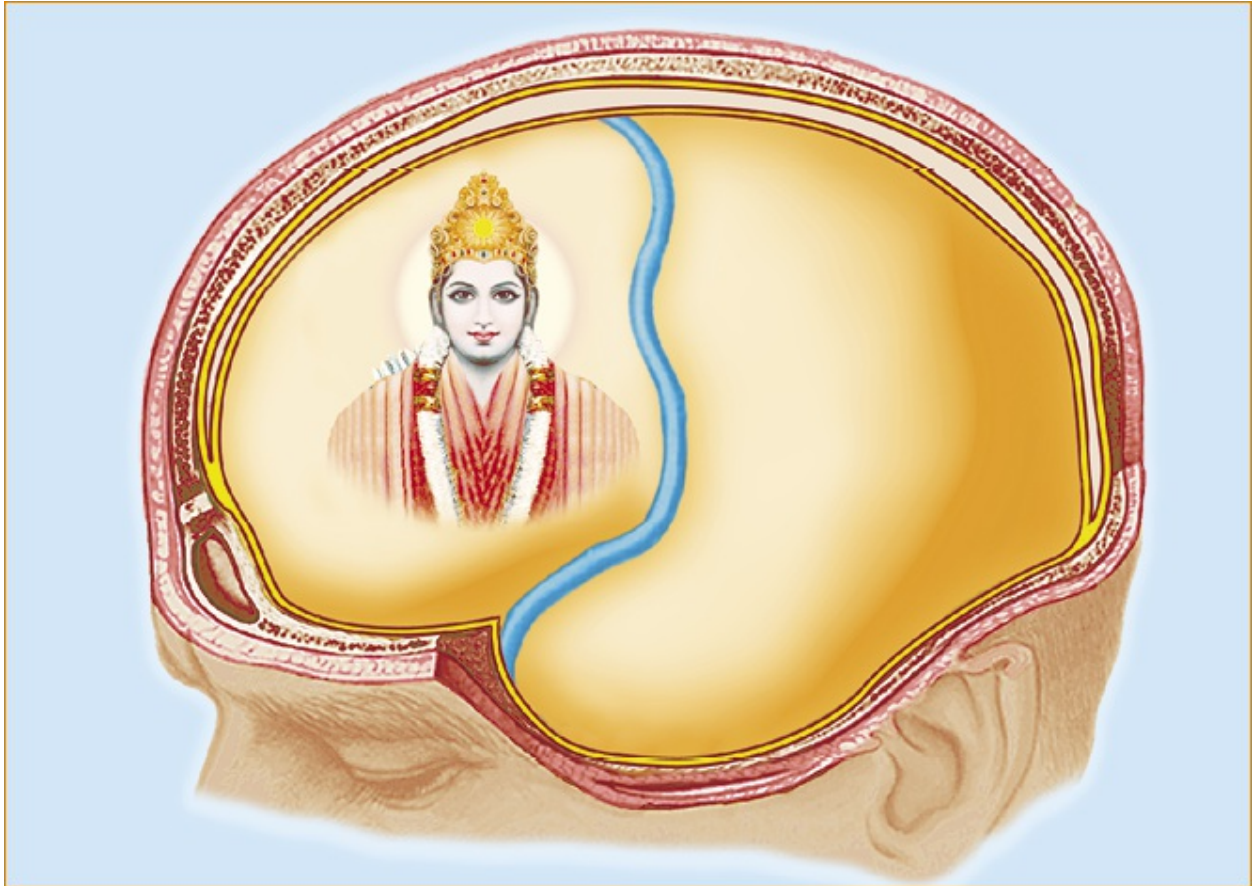
धर्मज्ञः सत्यसंघश्च प्रजानां च हिते रतः  
यशस्वद्दधी ज्ञानसम्पन्नः शुचिर्द्वर्द्यश्यः समाधिमान्

*Dharma-gyaḥ satya-saṁghash cha  
prajānām cha hite rataḥ  
yashaswī gyāna-sampannaḥ shuchir  
vashyaḥ samādhimān*

*(Bāl Kāṇḍ, 1.12)*

*He is a knower of Dharma (Natural Law), the embodiment of truth, and intent on the protection of his citizens;  
He is illustrious, filled with profound knowledge, powerful, of great purity, and established in the Self.*

Rām is located in the area of the somato-sensory and supplementary motor cortex. This part of the brain is the great ruler of the entire physiology because all sensory information arrives here, and orders for all motor activity are dispatched from here. It is a supreme part of human physiology, an area of rulership and balance containing within it the structures of Vishṇu and Shiva.<sup>2</sup>



**Figure 6.1 Rām corresponds to the somato-sensory and supplementary motor cortex in the brain.**

Rām was the son of King Dasharath's first *Patnī*,<sup>3</sup> Queen Kausalyā, and the

eldest of four brothers. The summary in the first *sarga* explains that Rām's father, King Dasharath, was eager to please his citizens and crown Rām as King. But before Rām could be installed, Queen Kaikeyī, another of Dasharath's *Patnī*, demanded two boons that King Dasharath had promised her many years before. To fulfil these boons, she asked that Rām be exiled to the forest for 14 years, and that her son Bharat—one of Rām's younger brothers—be installed as king. Even though this caused King Dasharath great distress, he was bound by his promise and exiled his beloved Rām. Wishing to honour his father's promise, Rām left for the forest accompanied by Sītā and his brother Lakshman.

## **The Meaning of Family Relations in the Context of the Rāmāyaṇ**

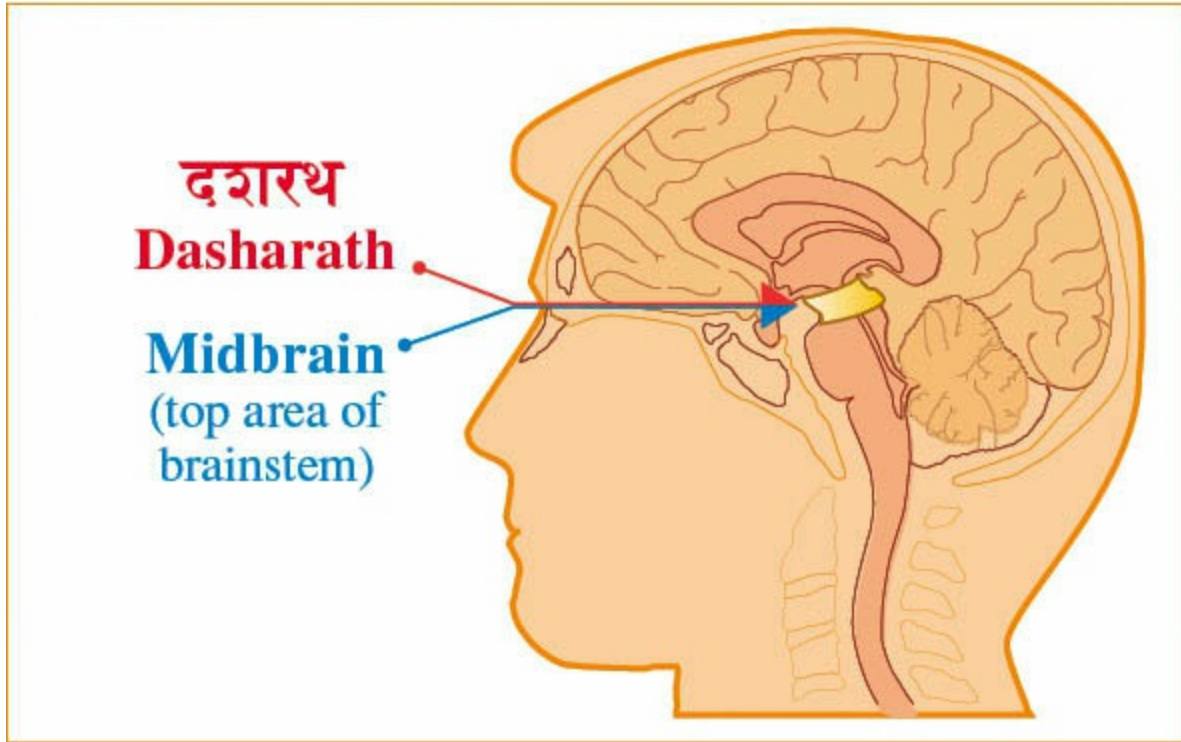
It is important to understand in the context of the Rāmāyaṇ and the Vedic Literature that the Sanskrit terms for family relations, which are generally translated as 'husband', 'wife', 'son', or 'daughter', etc., often have more profound senses that refer to the relationships and interactions between different structures and functions of Natural Law.

In the physiology *Patnī* ('wife') refers to a specific aspect of Natural Law with a nourishing and supporting quality, such as that of blood vessels, which supply nourishment to all organs of the body. These vessels are like the 'mothers' of a specific domain (*Pātya*).

On a deeper level of the physiology, *Patnī* embodies the organizing intelligence of Natural Law with respect to the differentiation and nourishment of all cells and tissues (see Chapter XX on the role of *Asiknī* and *Prasūti*, as described in '[The Descendants of Daksha](#)'). This means that there are certain Laws of Nature responsible for the structure of the organ itself (*Pati*) and other Laws for the nourishment and support (*Patnī*) of that structure, which together are responsible for the growth and evolution of that domain (see also Chapter IV, '[The Prakṛiti of Shiva, Viṣṇu, and Brahmā](#)'). In terms of the whole physiology, Rām is

*Pati*, the Lord supported by his *Patnī* Sītā, who as the cardiovascular system is the Mother of the Domain for the whole physiology, nourishing every cell and organ.

In this way, there are certain male or *Purusha* aspects of Natural Law responsible for the intelligence underlying, upholding, and controlling specific structures of Natural Law, and feminine counterparts—*Prakṛiti*—that are responsible for the growth and nourishing support of that structure. Depending on their interactions, they are termed *Pati* (‘lord’, ‘master’, ‘husband’) and *Patnī* (‘mistress of’, ‘wife’), *Putra* (‘son’), or *Putrikā* (‘daughter’).



**Figure 6.2 King Dasharath corresponds to the midbrain.**

King Dasharath, as we will discuss in detail in later sections, is located in the brainstem, in particular in the midbrain. This part of the brain rules over the inner aspects of the physiology, and is an extremely important centre through which all information must pass as it enters and leaves the brain.

Queen Kaikeyī corresponds to the anterior cerebral artery, which covers the anterior parts of the brain and curves around the cingulate gyrus and the limbic system. The limbic system is related to pleasure, emotions, feelings, and to the anticipation of the future.

Rām's 14 years of exile corresponds to the development of different skills and the establishment of various relationships in the growing physiology. It refers to the period in which connections and pathways between different parts of the nervous system and the physiology as a whole are created. This is the initial period of physiological development of any human being, during which one unfolds one's personality and structures the ability to think and function in accord with Natural Law. As we grow from childhood to adulthood and cultivate these skills, our brain continues to grow and develop increasingly fuller values of connectivity within itself, gaining control of the internal functions of physiology as well as their relationship to the environment. These skills unfold by virtue of Rām making connections with different parts of the body, thereby creating a more integrated and mature state of physiological functioning.

As we continue through the epic, we will find Rām interacting with *Rishis* as well as with a variety of other individuals. These encounters describe the creation of connections and relationships between the brain and diverse elements of the physiology. We will also find Rām engaging and destroying *Rākshasas*, which corresponds to the elimination of imbalances and disease.

While Rām, Sītā, and Lashmāṇ were living in the forest, Sītā was abducted by the king of the *Rākshasas*, Rāvaṇ. In his search for Sītā, Rām was aided by the divine Hanumān, who became his great devotee. Hanumān is celebrated in the Rāmāyaṇ and throughout the Vedic Literature for his immense power and unique abilities, including his capacity to become very large or very small, sometimes penetrating minute areas while simultaneously performing incredible feats. Hanumān's significance to the narrative as well as to human physiology warrants extensive consideration when he appears



later in the story. In addition, Chapter XIX provides more details of his role in restoring balance and maintaining the physiology's proper evolutionary functioning.

In the *Sundar Kāṇḍ*, the fifth major division of the Rāmāyaṇ, Hanumān discovered Sītā in the city of Lankā where she was being held captive by Rāvaṇ. Once Rām learned of Sītā's location, he directed the construction of a bridge over the sea to Lankā and led an army of divine beings to fight Rāvaṇ and his *Rākshasas*. This battle marks the climax of the Rāmāyaṇ and corresponds to the full purification and restoration of the physiology.

The first *sarga* of the *Bāl Kāṇḍ* is especially significant with respect to Nārada's description of Rām and his return to Ayodhyā, which we will examine in greater detail in our discussion of the *Yuddha Kāṇḍ*.<sup>4</sup> Rām's return to Ayodhyā marks the restoration of perfection to every level of life. We learn from the descriptions in the first *sarga* that everyone at that time lived in full accord with Natural Law, and indeed Nārada notes in the following verse that life in Ayodhyā was heavenly, for all the citizens lived in perfect health and fulfilment:

प्रहृष्टमुदितो लोकस्तुष्टः पुष्टः सुधर्मिकः  
निरामयो ह्यरोगश्च दुर्भिक्षभयद्वयजितः

*Prahṛishta-mudito lokas tushtaḥ pushtaḥ sudharmikaḥ  
nirāmayo hyarogash cha durbhiksha-bhaya-varjitaḥ  
(Bāl Kāṇḍ, 1.1.90)*

*(During the Reign of Rām) the people were  
exceedingly happy, content, fulfilled, and easily lived  
in accord with Dharma; they were free of sickness,  
free from disease, and devoid of famine and fear.*

When we examine in detail the descriptions from the *Yuddha* and *Uttar*



*Kāṇḍa* of Rām's rule, known as Rām Rāj, we will see that his final return corresponds to the unfoldment of perfection in individual life on the basis of the connections he has established between his place in the brain and the rest of the physiology. In such a perfected life, these connections are fully enlivened and result in the total development of the brain as well as the balanced functioning of all systems and organs, including the heart, which corresponds to Sītā.

During the rule of Rām, there was nothing lacking—everything was in its place and everything functioned effortlessly. Ayodhyā enjoyed automation in administration, in which every aspect of society functioned completely in accord with Natural Law. This corresponds to a situation in which every organ and every group of organs perform their proper function and allotted duties on the basis of their fully enlivened inner intelligence.

In this perfectly balanced and ideal civilization, the *Ṛishis* continually performed *Yagya* to sustain and enrich the kingdom. Even the *Rākshasas* were ruled by a devotee of Rām. Indeed, since Rām is ultimately the ruler of everything, he is also the ruler of the negative aspects of life, the *Rākshasas*, who were at this time subdued and living in accordance with Natural Law. This corresponds to a physiological state in which every imbalance is corrected and all disease eliminated, with negativity functioning only in the context of the evolutionary and holistic value of Natural Law, adjusting, restoring, and balancing disturbances that naturally arise.

The first *sarga* of the *Bāl Kāṇḍ* provides us with an overview of the Rāmāyaṇ, and therefore with an overview of the activities of our own physiology. As we continue *sarga* by *sarga*, we will discover the fine details of interactions between the characters, and we will see how these interactions describe the establishment of connections throughout the physiology that lead to the total authority of the brain over all emotions, feelings, intellect, and activity, as well as the unfoldment of the four values of Vedic Life—*Dharma* (life in accord with Natural Law), *Artha* (material wealth), *Kāma* (fulfilment

of desires), *Moksha* (life in freedom and perfection, life in enlightenment). Thus, in the summary given in the first *sarga*, we gain an understanding of the overall value of the Rāmāyaṇ.

## ***Sarga 2: Vālmīki Records the Rāmāyaṇ***

*Sarga 2* describes the circumstances under which Ṛishi Vālmīki recorded the Rāmāyaṇ. The narrative describes Vālmīki passing through the forest with his students, and becoming overwhelmed by grief as he witnessed a fowler killing a bird. This event illustrates a range of emotions, from the pleasant appreciation of the bird's song to the unpleasant experience of death and sorrow, culminating in wishes, hopes, anger, and even a curse. Thus, in this one event we find a variety of human emotions swelling within Vālmīki.

Vālmīki wished to express his feelings at that moment, but nothing emerged. He wanted to express Natural Law as it unfolds and expresses itself within the human mind and physiology. He wanted to express the totality of life. He had seen an event taking place in the forest that brought forth deep emotions and created a connection between his outer, physical reality and his inner, subjective reality of thoughts and feelings. There was an awakening within Vālmīki, and the emergence of the desire to give expression to the totality of Natural Law and to describe how life can become balanced. But even though he was brimming with emotion, his perfect expressions could not emerge until Brahmā, the total potential of Natural Law, arrived and he had surrendered to him.

When Brahmā arrived, he revealed Rām's eternal nature to Vālmīki, and requested that he record Rām's story. He explained that the story itself is eternal and will always be available, and therefore it was only necessary for Vālmīki to record it:

याद्वद्यत्स्थास्यन्ति गिरयः सरितश्च महीतले  
ताद्वद्यद्रामायणकथा लोकेषु प्रचरिष्यति

*Yāvat sthāsyanti girayah saritash cha mahītale  
tāvad Rāmāyaṇa-kathā lokeshu pracharishyati  
(Bāl Kāṇḍ, 2.36–37)*

*As long as the mountains and rivers remain on Earth,  
the story of the Rāmāyaṇ will continue among men.*

*Rām Līlā*, the play of Rām, is the story of Natural Law, the story of Totality, and therefore it is the account of the creation and maintenance of human physiology. Indeed, it is more than an expression of Natural Law, it is Natural Law itself. Maharishi has explained that without Veda, without the totality of Natural Law, nothing exists, because the whole creation is the expression of Natural Law. Therefore, without the reality of the Rāmāyaṇ there is no life on Earth, without the reality of Rāmāyaṇ there is no existence. This is the realization that Brahmā awakened within Vālmīki, and once he fully surrendered to Brahmā and was assured that his words would be the perfect expression of the eternal reality of Rām, the story of the Rāmāyaṇ naturally and spontaneously poured forth from his consciousness.

Brahmā's teaching to Vālmīki precisely describes the subjective method of gaining knowledge, and this is the same profound mechanism for acquiring knowledge that Maharishi has brought to the world. We can either gain knowledge objectively—through repeated observation and the analysis of the outer physical world—or we can employ the subjective means, by going back to our inner Self. Within our Self, within *Ātmā*, we can find Total Knowledge.

*Ātmā*, as we have seen, is the Self of everything and everyone, the total potential of Natural Law.<sup>5</sup> Through Maharishi's Transcendental Meditation programme we can experience *Ātmā* directly as our own Self, thus enlivening Total Natural Law within our awareness and awakening it in our entire physiology. In this way we gain the fruit of all knowledge, which is the ability to think and act in accord with Natural Law. This is the spontaneous result of practising Maharishi's Transcendental Meditation, which brings the

mind to the Self within, to pure Being, the Unified Field of Natural Law—the pure, self-referral subjectivity that is Total Knowledge.

These are the mechanisms of Vedic Cognition that we discussed in Chapter I.<sup>6</sup> Vedic Cognition is not an interpretation, an intellectual composition or thesis, nor is it the result of analysing one's emotions or drawing conclusions from observations. Vedic Cognition is the direct experience of the reverberations of Natural Law within *Ātmā*. All the Laws of Nature are present within the Unified Field, within the infinite silence of the self-referral consciousness of everyone, and as we transcend through Maharishi's Transcendental Meditation we awaken total Natural Law within ourselves.

*Sarga 2 of Bāl Kāṇḍ* clearly describes how Vālmīki cognized the Rāmāyaṇ, and answers any questions we might have concerning its origin. Did Vālmīki study what happened in history, collecting information and writing it down? Did he try to intellectually compose a beautiful epic poem? No. This *sarga* makes it clear that he was in the forest and witnessed an event (the fowler killing the bird) and was inspired. He was deeply moved and ready to express his feelings, but nothing arose until Brahmā appeared. This means that he could not act until Wholeness awakened within him. Once he went into himself, to the level of pure Being where the Laws of Nature reverberate, he was able to bring forth the Rāmāyaṇ. Vedic Cognition can only be experienced by a refined intellect, refined emotions, and refined ego, which are the result of transcending and becoming familiar with Totality.

Vālmīki himself described this phenomenon, and confirmed that the basis of the Rāmāyaṇ is Veda:

मच्छन्दादेद्धृद्य ते ब्रह्मन् प्रद्वष्टृत्तेयं सरस्वद्यती

*Mach-Chhandād eva te Brahman pravṛtiteyaṁ Saraswatī*  
(*Bāl Kāṇḍ*, 2.31)

*From My Chhandas alone, O Brahmā, has this knowledge come forth.*

‘From My Chhandas’ means ‘from the verses of the Veda’, and thus we see in this verse that the Rāmāyaṇ emerged from the eternal field of Veda. Vālmīki did not compose the verses in the traditional sense, but rather he ‘saw’, or cognized, them deep within himself. The expressions arose spontaneously from within him, and Brahmā’s appearance indicates that it is the Creator Himself, the total potential of Natural Law, who inspired the verses of the Rāmāyaṇ from the pure feelings born of Vālmīki’s refined consciousness and physiology.

We can compare the cognition of Veda to the inspiration of a composer, who has an inner feeling of harmony and expresses it as music. He hears music and rhythms of nature within that bring him joy, and he plays the melody as it spontaneously emerges from his subtlest level of feeling, the subtlest level of the intellect, which is very close to the pure experience of Transcendence. Vedic Cognition is a far more profound and complete experience than the composition of a melody or symphony, however, for it arises from the direct experience of the totality of Natural Law.

This story is reminiscent of one that Maharishi often told about the origin of creation. Maharishi described how Brahmā wanted to create but nothing came forth, and only when he went inside himself did creation emerge. How did creation come out? It came as it was before, as the repetition of Natural Law expressing itself. These mechanics are reminiscent of an expression from the Bhagavad-Gītā, in which Lord Kṛishṇa, the embodiment of Totality, describes how creation unfolds from his curving back onto his own nature, the Self:

प्रकृतिं स्मृद्यामद्वयष्टभ्य द्विद्यसृजामि पुनः पुनः

*Prakṛitiṁ swām avashtabhya visṛijāmi punaḥ punaḥ*  
(Bhagavad-Gītā, 9.8)

*Taking recourse to my Prakṛiti, taking recourse to my Self,*

*'I' create again and again—my self-interacting dynamics  
promotes the sequential theme of evolution of all life.*

As we progress with our analysis, we will see that the events of the Rāmāyaṇ describe the reality of the physiology of every human being, the behaviour of every human being, the eternal truth in every field of society, in psychology, in every field of national and international relations, and in the structure, function, and evolution of the entire universe. This is the Rāmāyaṇ and this is the essence of the second *sarga*.

### ***Sarga 3: The Mechanics of Cognition***

The third *sarga* illustrates in greater detail the manner in which the knowledge expressed by Vālmīki originated within Ātmā, within the total potential of Natural Law. The second verse of *sarga* 3 describes Vālmīki preparing himself to cognize the exploits of Rām:

उपस्पृश्योदकं सम्यङ् मुनिः स्थित्दद्या कृताञ्जलिः  
प्राचीनाग्रेषु दर्भेषु धर्मेणान्दधेषते गतिम्

*Upaspr̥shyodakam samyan muniḥ sthitwā kṛtāñjaliḥ  
prāchīnāgreshu darbheshu dharmeṇānveshate gatim  
(Bāl Kāṇḍ, 3.2)*

*Sipping water according to tradition, sitting on a mat of kusha grass  
with its blades pointed toward the East, with palms joined together, the  
sage sought the exploits (of Shrī Rām) through the power of Dharma  
(Natural Law).*

To prepare himself, Vālmīki sat facing East, holding in his mind an intention, or *Sankalpa*. By facing East, he followed the procedures of Maharishi Sthāpatya Veda, which describes how to live in accord with Natural Law. Facing East he practised Yoga (Transcendental Meditation) and came back to



the self-referral value of Natural Law.

Vālmīki did not try to imagine or think, he simply faced the rising Sun and immersed himself within his Self. The verse makes clear that his cognition is from *Dharma*—the total potential of Natural Law—and on this basis he saw the entire story of the Rāmāyaṇ, including Rām, Sītā, Dasharath, and all of their actions and interactions as Laws of Nature vibrating within himself. Thus sitting established in *Dharma* he saw the reality of the Rāmāyaṇ as it occurred.

Vālmīki’s expression of the story of Rām is, in fact, the story of himself, the story of his own consciousness, his own physiology. When Vālmīki beheld Sītā, he observed her as his own heart and cardiovascular system, and when he saw different aspects of the Rāmāyaṇ, such as the members of Dasharath’s court, he experienced them as the subtle aspects of his brainstem area. When he saw Shatrughna, he saw him as an expression of Natural Law in a part of the brain, with his mother Sumitrā as the artery nourishing it. Vālmīki saw them on the level of their most refined expression, on the level of pure consciousness vibrating as sound, but he experienced them through their corresponding physical structures enlivened in his own physiology.

The subjective technology that Vālmīki employed is the most complete system of gaining knowledge in the world, the system of gaining knowledge on the level of our own self-referral consciousness. Maharishi has made this system of gaining knowledge available in the world today, so that every part can be seen in terms of the whole. The whole is seen as the totality of all that ever was and ever will be, displaying itself in our own physical structure and in all the physical structures of the entire universe. This is the beautiful contribution of the third *sarga* of the *Bāl Kāṇḍ* of the Vālmīki Rāmāyaṇ.

### ***Sarga 4: The Recitation of the Rāmāyaṇ*** **by Kush and Lav**

After formulating the expressions of the Rāmāyaṇ, Vālmīki considered who

would be qualified to recite them. When Kush and Lav, the two sons of Rām and Sītā, appeared, Vālmīki decided to teach them the Rāmāyaṇ in order to enlighten them about the meaning of Veda.

After learning the Rāmāyaṇ, Kush and Lav travelled from city to city reciting it everywhere, delighting and enlightening all who heard. One day Rām—who had never before seen Kush and Lav—heard them reciting, and when they were introduced to Him as his sons by the Sage Vālmīki, Rām replied:

जानामि चेमौ पुत्रौ मे यमजातौ कुशीलद्धद्यौ

*Jānāmi cha imau putrau me yamajātau kushīlavau*  
(Uttar Kāṇḍ, 97.5)

*I know these twin sons of mine, Kush and Lav.*

He knew them because they were reciting the story of the Rāmāyaṇ to perfection. In this *sarga*, we see that Rām and his sons are really one: Rām is *Brahm*, and this expression of reality describes Wholeness seeing Wholeness and recognizing it as itself.

The fact that Kush and Lav were his sons indicates that they were part of him. And of course Rām’s recognition and confirmation of Kush and Lav’s recitation of the Rāmāyaṇ leaves no doubt as to the authenticity and accuracy of Vālmīki’s cognition.

When any human being recites the Rāmāyaṇ in such a perfect manner, Brahmā recognizes him as Himself. To recite the Rāmāyaṇ means not only to chant it properly, but also to embody it. Kush and Lav could not have recited the Rāmāyaṇ to such a degree of perfection if they were not themselves the embodiment of that reality, its expression in a different form.

Every one of us is Totality, every one of us has Rām and the Rāmāyaṇ within him or her, and every one of us can recite the full value of the Rāmāyaṇ in

the sense that we can live it and express it through our every thought, speech, and action. Reciting it on the level of sound is one reality and living it physiologically is another. These two aspects may seem different since one is more material while the other is more on the level of sound and vibration, but ultimately they are the same thing.

We could say that Kush and Lav recited the Rāmāyaṇ, but we could also say that they did not recite it so much as they behaved and moved in a particular manner such that Rām recognized their appearance, movements, and general behaviour as a recitation of the Rāmāyaṇ—their looks, their thoughts, and their feelings were a recitation of the Rāmāyaṇ in physical form. And Rām recognized them as his sons, which means that they were himself expressed in a different form.

Everyone can achieve this reality through Maharishi's programmes of Natural Law. Each of us has the capacity to become a living embodiment of the Rāmāyaṇ, able to recite it while thinking, moving, and acting. When Rām sees us as he saw Kush and Lav, he recognizes that we are also him. It is the ultimate reality of our dignity and our cosmic nature that Rām, who is *Brahm*, in a sense sees himself in each of us. Maharishi's role in the world today is to enable everyone to become the embodiment of *Brahm*, so that *Brahm* can recognize us as *Brahm*, so that we can also recognize this divine reality, and live it, and become one with it.

*Sarga* 4 confirms the significance of the oral tradition of Vedic Paṇḍits, and the importance of properly transmitting the traditional recitation of the Rāmāyaṇ and the entire Vedic Literature from generation to generation. Maharishi has often noted that the reverberations of the Vedic Sounds enliven the physiology and awaken the full value of Natural Law, and that listening to the recitation of the Rāmāyaṇ is a powerful technology for the unfoldment of higher states of consciousness. Indeed, we learn in *sarga* 4 that those listening to Kush and Lav experienced bliss and fulfilment from the recitation,<sup>7</sup> indicating that it was not only pleasing but also created a

profound and powerful effect on their minds and bodies.

The correctness and completeness of the recitation is one level of importance, but Maharishi has also emphasized that the Paṇḍits themselves must be a living reality of Veda. Vedic Paṇḍits are the sons of Veda, they are the children of infinity, of Total Knowledge, and therefore it is extremely important that they unfold Veda within their own consciousness. For this reason Maharishi has ensured that his Paṇḍits meditate and transcend so that the recitations of the reverberations of Veda come from their fully awakened consciousness and physiology. The most powerful effect comes from one whose awareness is permanently established in the total potential of Natural Law, and in this *sarga* we find that Kush and Lav are clearly described in terms of this refined state of consciousness:

ऋषीणां च द्विजातीनां साधूनां च समागमे  
यथोपदेशं तत्तद्द्वयज्ञौ जगतुः सुसमाहितौ

*Ṛishīṇām cha dwijātīnām sādḥūnām cha samāgame  
yathopadeshaṁ tattwagyau jagatuḥ susamāhitau  
(Bāl Kāṇḍ, 4.13)*

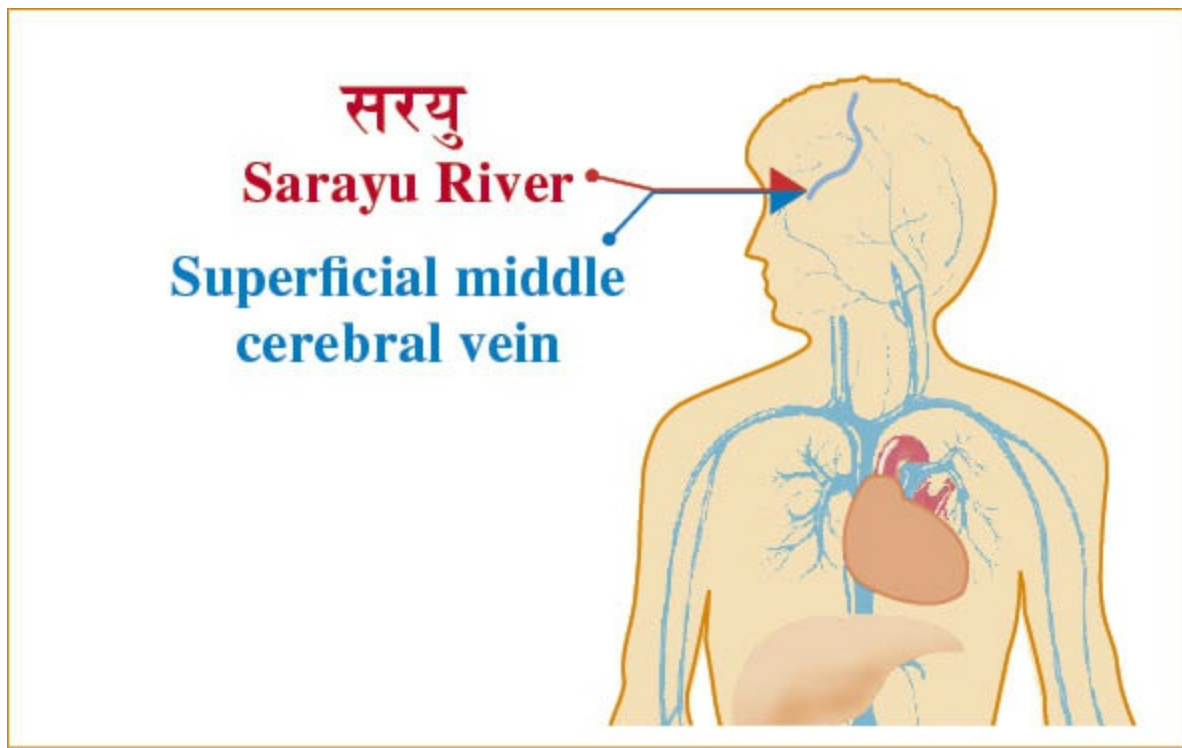
*These two knowers of reality recited (the Rāmāyaṇ) in the traditional manner, in a gathering of Ṛishis, Brāhmaṇas, and Sādhus, with their awareness established in Unity.*

Maharishi has given us the technology of transcending, which allows us to recite in the same manner as Kush and Lav, in the traditional way—established in *Samādhi*, pure Being. It is from this level of pure consciousness that we can understand the full value of Veda. Veda is always established on the level of self-referral pure awareness, which is the source of these vibrations and sounds—it is the totality of Natural Law, which

expresses itself as all levels of life, including individual consciousness, collective consciousness, the physiology, and the universe.

### ***Sarga 5: The City of Ayodhyā***

*Sarga 5* describes the kingdom of Kosala with its capital, Ayodhyā, where the story of the Rāmāyaṇ begins. It describes the River Sarayu, which we saw in *Human Physiology: Expression of Veda and the Vedic Literature* to be the superficial middle cerebral vein.<sup>8</sup>

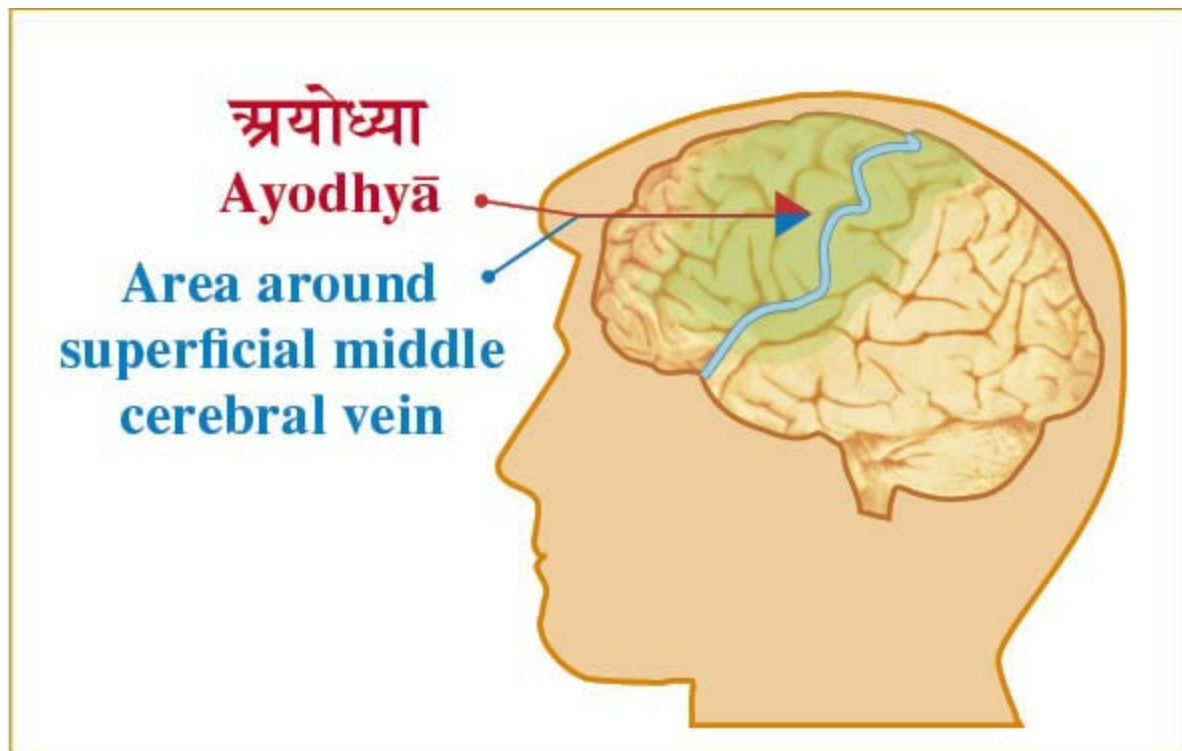


**Figure 6.3 The Sarayu River corresponds to the superficial middle cerebral vein.**

*Sarga 5* describes the dimensions of Ayodhyā as twelve *yojanas* in length and three in breadth. This 4-to-1 proportion corresponds to the dimension of the brain in the areas around the middle cerebral vein or superficial vein, and the three central gyri and four central gyri respectively along the sides. These areas are four times longer than they are wide, corresponding to the dimensions of Ayodhyā. This is just a simple example to illustrate that even

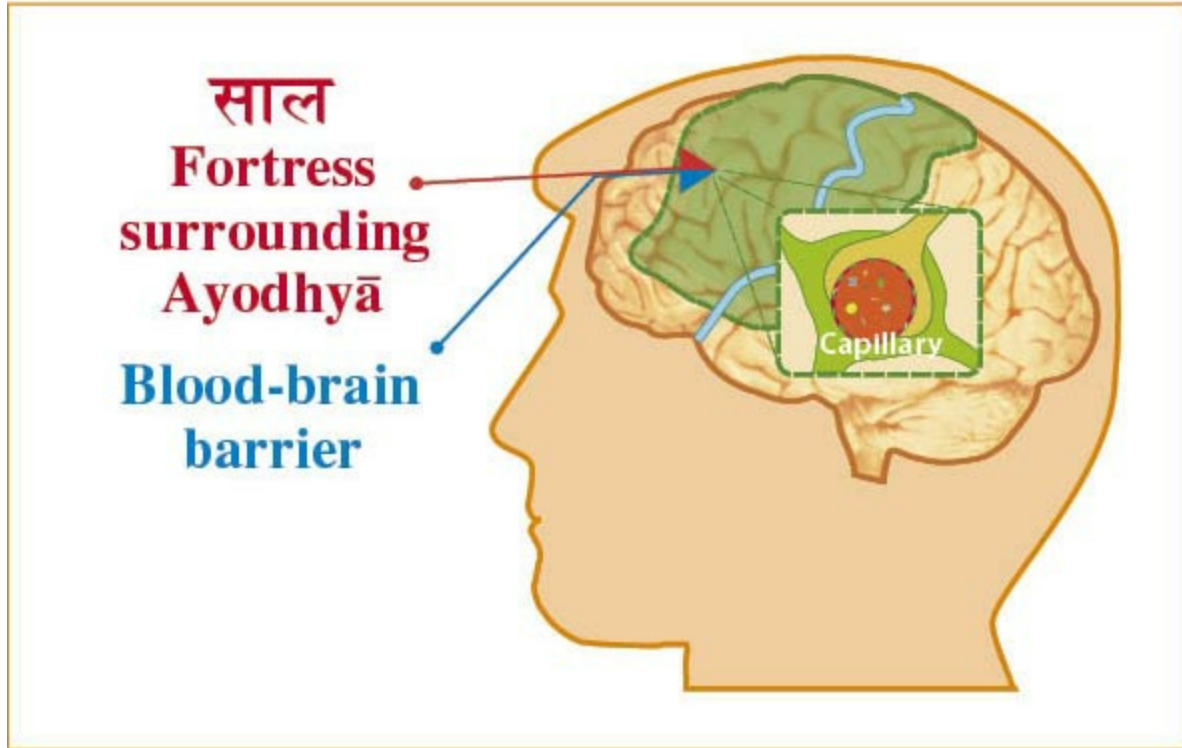
when we look at the dimensions and proportions mentioned in the Rāmāyaṇ we find an exact correlation in human physiology.

The fortress protecting Ayodhyā corresponds to the blood-brain barrier, which surrounds and protects the brain, insulating it from harm. Only oxygen, some nutrient sugars, and some fluids are permitted to pass through the blood-brain barrier to the brain, and in this way it is similar to the protection around a city—nothing harmful can enter, only positive elements.



**Figure 6.4 The city of Ayodhyā corresponds to the area of the brain around the superficial middle cerebral vein.**





**Figure 6.5 The fortress protecting Ayodhyā corresponds to the blood-brain barrier.**

The houses in Ayodhyā were seven storeys high, and the city is described as busy, prosperous, and unmatched in splendour. Likewise, the cerebral cortex has six layers, along with the white matter that supports it. The ground floor of the house corresponds to the white matter, and the six subsequent stories correspond to the six layers of the cerebral cortex, each with its own unique function and structure. The crowds of merchants and all the activities of the busy marketplace refer to the neuronal activities occurring between the different layers, which exchange messengers and nutrients, and build bridges between different layers.

*Sarga 5* mentions that the crowds in the marketplace included *sūtamāgaghas*, a type of informant who brings information to the king about what the citizens are thinking and feeling. This corresponds to a kind of neuronal messenger that conveys information to the higher parts of the brain.

## ***Sarga 6: King Dasharath***

*Sarga 6* describes Rām's father, King Dasharath, one of the most significant kings in the Vedic Literature, as well as the beautiful and orderly kingdom over which he presided. Dasharath is located in the brainstem, which is also the seat of Chakravartī, the ruler of the universe. In order to fully understand the physiological significance of King Dasharath, we must also consider descriptions of him in the Rām Charit Mānasa of Tulsīdās, where we find characteristics that enable us to precisely locate him within our own physiology.

Tulsīdās recounts that in a previous life Dasharath was Ṛishi Kashyap. Kashyap's progeny include all of the animal kingdom as well as human beings, *Devatās*, and *Rākshasas*. Prior to the birth of his offspring, Kashyap undertook a long period of devotion to Viṣṇu, which means that he allowed his awareness to identify itself with Transcendental Consciousness for an extended time. Kashyap remained in this perfect state of renunciation for several thousand years, fully immersed in the Transcendent. Upon emerging, he requested a boon from Viṣṇu: that he be granted a son who would be like Viṣṇu. Viṣṇu responded by saying that no one could be like Viṣṇu—one born *like* Viṣṇu could only *be* Viṣṇu. Viṣṇu thus told Kashyap that he would become his son in a later incarnation, and so Kashyap was later reborn as King Dasharath and Viṣṇu took birth as Rām. Kashyap in his incarnation as Dasharath successfully reigned over Ayodhyā for thousands of years, always perfectly in accord with Natural Law.

King Dasharath's reign is beautifully described in the *Bāl Kāṇḍ*, where it says:

तस्मिन् पुरद्धरे हृष्टा धर्मात्मानो बहुश्रुताः  
नरास्तुष्टा धनैः स्द्धैः स्द्धैरलुब्धाः सत्यद्धादिनः

Tasmin puravare hr̥ishtā dharmātmāno bahu-shrutāḥ  
narās tushtā dhanaiḥ swaiḥ swair alubdhāḥ satya-vādināḥ  
(Bāl Kāṇḍ, 6.6)

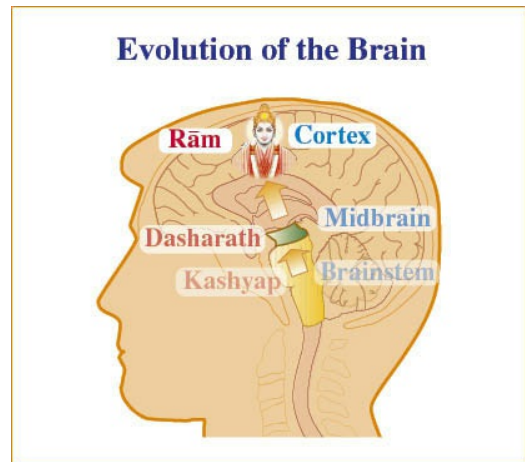
*In Ayodhyā, the people were blissful, established in Dharma (Natural Law), and well versed in the Vedic Literature. They were all pleased with their own fortune, free of greed, and their speech was based upon their inner Being.*

Dasharath's successful rule over Ayodhyā provides the first evidence of his place in the physiology. This quality of rulership is located in the brainstem area, which controls breathing, behaviour, heartbeat, wakefulness, and all vital functions, and maintains their proper balance. This part of the brain contains the structure of the palace of Chakravartī, the ruler of the universe.<sup>9</sup>

The correlation between Dasharath and the brainstem enables us to understand why he is described as the parent of birds, reptiles, etc., when he was Kashyap in a previous life. When we examine the physiology of different animals we find that they have the equivalent of a human brainstem but lack the so-called 'new' structures, or higher parts of the brain such as the cortex, which is solely characteristic of human beings in its development, volume, and abilities of cognitive function. The lower parts of the brain directly control vital functions, reflexes, and instinctual behaviour, which are completely automated in accordance with the Laws of Nature, but which do not include the higher cognitive functions found in the cortical regions of the human being. Therefore the account of Dasharath's previous life indicates that his sovereignty included all levels of creation—birds, animals, reptiles, as well as human beings.

Kashyap and Dasharath are one and the same, yet Dasharath is a new incarnation of Kashyap. What distinguishes Dasharath from Kashyap is that Dasharath has Rām as his son. Kashyap is located in the brainstem of all animals that lack a higher cortical area, whereas Dasharath is found in the human brain, which we know contains higher cortical areas that correspond to Rām. It is these higher cortical areas, including the cortex and different lobes of the cortex, that allow us to think, plan, and ultimately unfold higher states of consciousness—Cosmic Consciousness, God Consciousness, and Unity Consciousness. In the lower species, the brainstem—as well as an aspect of the cortex in some animals—is the ruler of the brain, but lower species do not have the ability to unfold Totality.

The total potential of Natural Law is lively at every point of creation—everything in creation possesses the totality of Shiva, Vishṇu, their *Prakṛiti*, and all the Laws of Nature underlying the intelligence of Nature’s functioning. However, it is important to note that the extent to which Totality can be unfolded and experienced on a conscious level depends upon the level of evolution: the degree to which Totality can be experienced will be different in the physiology of an animal, a bird, or a human being. Human physiology is a cosmic physiology, containing the 40 branches of Veda and the Vedic Literature as well as all the *Devatās*, and is therefore able to live and experience Totality, Unity Consciousness, the full potential of human life.



**Figure 6.6 Kashyap, Dasharath, and Rām correspond to the sequential development of the brainstem, midbrain, and cortex respectively.**

In this context we see that the reincarnation of Kashyap as Dasharath is simply an expression of the force of evolution—it is a manifestation of the

evolutionary power of Natural Law, which is able to express itself in different forms. When Natural Law manifested in the form of Dasharath with Rām as his son, the totality of *Brahm* was awakened. Therefore when we look at the brainstem of the human being we can call it Dasharath. Other species that possess a brainstem but lack higher cortical areas correspond to Kashyap. Both have rulership over life, both have total Natural Law within them, but only the human brain has the ability to live Rām, to live *Brahm*.

The evolutionary force that we witness in Dasharath and Kashyap expresses itself again and again in increasingly more evolved states of existence. It can also be seen on the evolutionary ladder—from primitive animal species, which have a more primitive brain, to the development of higher cortical centres in human beings. Before the birth of Rām, Dasharath had not yet fully enlivened his total cosmic potential, and therefore enjoyed a lesser level of achievement. Dasharath's *Yagya* and his withdrawal into his Self describe the means through which he unfolded Rām in his brain.

Comparing Kashyap to a more primitive state of the brain does not mean that he is not an exalted *Ṛishi*. As we shall see, virtually all the *Ṛishis* are located in the brainstem. It is a more ancient part of the brain, yet within it are contained all of the most important centres for maintaining the vital internal functions of the body that are essential for any conscious experience.

To have a human body is a unique and precious opportunity, because it allows us to awaken Rām within ourselves and live the full value of Natural Law. Our physical form contains the instrument that allows us to transcend and live Unity Consciousness. When we act in accord with Natural Law we develop the total brain, whereas if we commit wrong actions—actions not in accord with Natural Law—we take on less human and more animalistic qualities.

When individuals who have not developed their full brain behave aggressively, destroying and killing like predatory animals, they are not making use of the evolutionary advantages of the human brain, which could

enable them to live Totality in life. Anyone who behaves in such a manner harms himself the most, whereas a person who acts in accord with Natural Law gains the full support of Nature. The most profound activity that any of us can perform is to transcend and participate in the collective practice of the Transcendental Meditation and TM-Sidhi programme, which creates coherence in ourselves and in the collective consciousness of society.

The life of a human being should be a life of *Brahm*, a life of Rām. With the grace of Maharishi and the Holy Tradition of Vedic Masters it is possible to live the full value of the Rāmāyaṇ, the totality of Natural Law.

*Sarga 6* also describes the four divisions of society and their responsibilities. These four levels correspond to the systems that maintain balance between different aspects of our physiology. For example, the *Brāhmaṇa* caste must ensure that everything in society comes back to the Self—that everything remains in accord with *Dharma*. The most important *Brāhmaṇas* are the Vedic Paṇḍits, who ensure the awakening of total Natural Law by enlivening the reverberations of sound from the level of Unity Consciousness. In this way the Paṇḍits bring the entire physiology of creation, including both individual and society, into harmony with total Natural Law. The *Brāhmaṇas* are therefore the feedback loops and homeostatic mechanisms of the physiology. In *Human Physiology: Expression of Veda and the Vedic Literature* we discussed in detail how feedback loops are self-referral mechanisms that bring information back to the Self in order to maintain the body's homeostasis and balance.<sup>10</sup>

The second level of society described in *sarga 6* is the *Kshatriya* caste, which includes the administrators and warriors. The *Kshatriyas* are the ordering systems of the physiology, including the parts of the brain in which Rām is present in the cerebral cortex—the switchboard and ruler of physiological activities from which the final orders and commands arise for speech and action.

The third level is the *Vaishya* caste, which comprises the merchants. The



*Vaishyas* correspond to those aspects of the physiology that are engaged in the exchange and transformation of different values of food, such as the transformations that take place in the liver, the transportation of nutrients to different parts of the body, and the exchanges between molecules, all of which enable the body to grow and maintain itself. One example of the *Vaishya* caste is the systems and structures that enable glucose to be exchanged into carbohydrates or fats, which can be stored for later use or made available for immediate energy needs.

The *Shudra* caste is the fourth level of society, the servants. The *Shudras* correspond to the mechanisms for removing toxins, and include any system that helps cleanse or detoxify, such as the venous system, kidneys, and immune system.

This *sarga* also describes different transport systems such as horses and elephants, which correspond to various proteins that transport molecules in the blood throughout the body, as well as other systems that take nutrients across the cell membranes. Different transports convey large and small molecules respectively, but all are acting under the rulership of the central part of the brain—the midbrain area, where King Dasharath resides in his beautifully functioning kingdom.

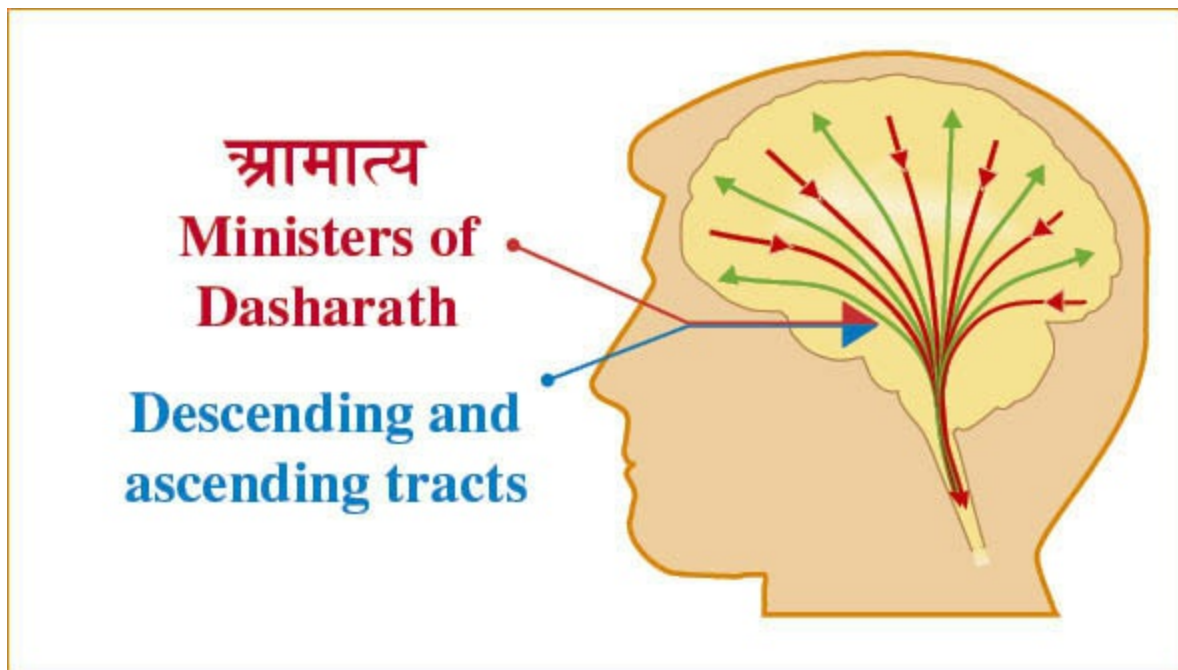
### ***Sarga 7: The Administration of King Dasharath***

The seventh *sarga* describes the administration of King Dasharath. Dasharath maintained a loving, paternal reign, and administered in an evolutionary manner that led to increasing happiness and fulfilment for all of his subjects. We can compare this to a more evolved state of the brain in which inner feelings and sensations as well as outer sensory inputs are processed in such a way that the resulting actions and reactions are always perfectly in accord with Natural Law.

Under King Dasharath we find three types of councillors: the *Brāhmaṇas*, who were the advisors; the ministers, who took the King's instructions and

administered Ayodhyā accordingly; and informants, who brought information to the King. Human physiology contains these same three elements of administration:

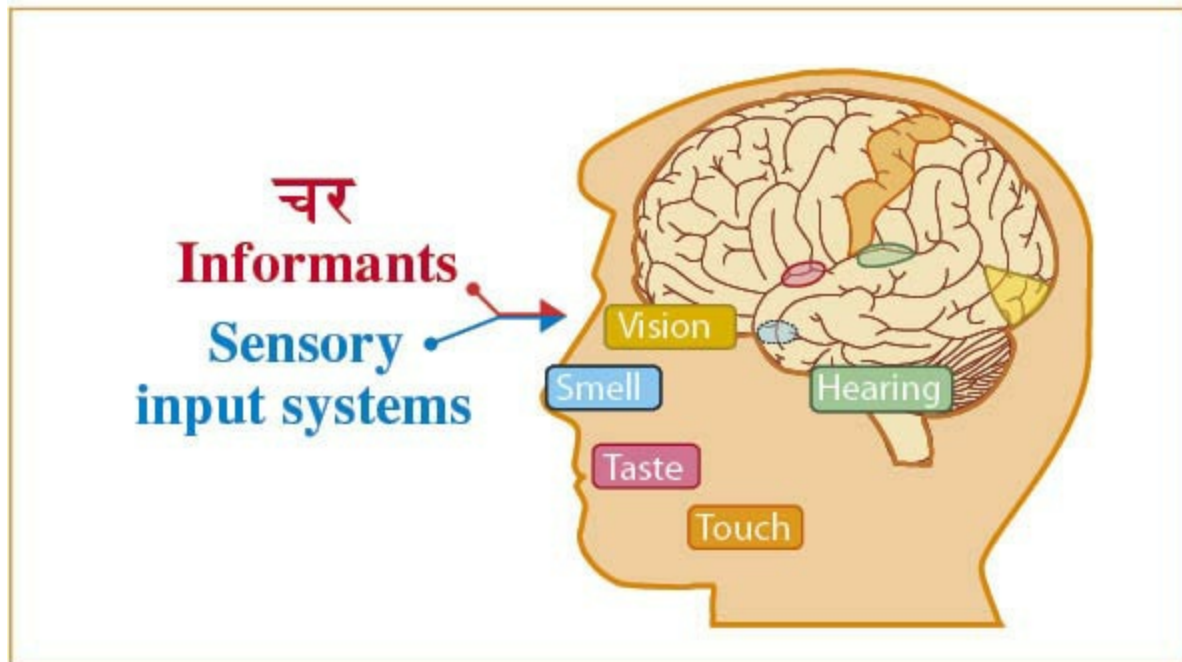
1) The ministers of Dasharath's court conveyed information from the King, and correspond to factors that provide messages to the different organs and muscles, instigating different types of speech, behaviour, and action. For example, certain factors can make the heart beat faster or the digestive tract move more slowly. The ministers also correspond to the descending and ascending tracts of the central and peripheral nervous system.



**Figure 6.7 The ministers of King Dasharath correspond to the descending and ascending tracts of the nervous system.**

2) The informants correspond to the incoming mechanisms, which bring information to the central nervous system. Our eyes, ears, and our entire sensory system gather information and bring it to the body's administrative centres. This category also includes the mechanisms for gaining information concerning the internal functions and state of the body, which tell us when something is wrong. For example, when we feel pain we are alerted to an area

needing attention.



**Figure 6.8 The informants of King Dasharath correspond to the sensory input systems.**

3) The third category in Dasharath's administration is the councillors, the *Rishis*, who give counsel and guide the king. The *Rishis*' role is to guide the king's response to incoming information, and when we consider the *Rishis* we will see that each corresponds to a specific structure in the physiology that serves as a balancing mechanism between thinking and acting.

Earlier we explained that the brainstem is the seat of King Dasharath, and that the *Rishis* therefore correspond to the different nuclei in the brainstem that integrate and guide the functioning of the physiology based on its needs. This is the role of the *Rishis* in our brain—they don't act, but rather they provide guidance to other structures, such as where Dasharath is located, or even higher structures such as the areas where Rām is located.

In *Human Physiology: Expression of Veda and the Vedic Literature* we described the seven main *Rishis*, the *Sapta Rishis*, as the seven principal

columns in the brainstem. The *Ṛishis* also correspond to the seven main stars that are part of the Big Dipper, or Great Bear, Ursa Major.<sup>11</sup>

In the last few hundred years these structures have been given scientific names, but their true names are their Vedic names. We have the Vedic names from the eternal Vedic Tradition, the Holy Tradition of Vedic Masters and the Vedic Paṇḍits in India. When we speak a *Ṛishi*'s name we awaken the corresponding physiological structures, but when we call a structure such as the locus caeruleus by its modern name, we are not expressing the vibration that is at its basis. It is very important to restore the proper name for these physiological structures because a Vedic name is based upon specific characteristics, and therefore the name of a *Ṛishi* is to be respected. This same principle is true for all the characters of the Rāmāyaṇ—they are all lively within our body, and each has a Vedic name that must be used in order to enliven the most ideal functioning of the physiology.

The structures in our body are the lively structures of Natural Law. They are awake within us. If an unfortunate accident should occur and a part of our physiology corresponding to a *Ṛishi* were to lose its ability to function properly, the ability of that *Ṛishi* to function within us would be inhibited. For this reason we should not expose them to harmful foods or experiences.

In previous chapters we learned that the Vedic *Devatās* are present in our physiology. It has long been the tradition to behave respectfully towards the *Devatās*, because they are the administering intelligence of Natural Law, giving knowledge and support to our mind, desires, and intentions, as well as to the functioning of our physiology. It may be that we want to succeed, or to have a good education, a successful business, healthy children, or a happy life, etc. In each case, it is necessary to follow the correct tradition of behaviour, including showing proper respect, in order to maximize the benefit from the *Devatās*. Since these *Devatās* are present within us, it follows that our body truly is like a temple and we must treat it appropriately.

It is good to treat others with this same respect, because their bodies also

contain *Devatās*. Every individual is divine, every individual has a cosmic nature. This knowledge has been part of every great society, and now with the grace of Maharishi and the Holy Tradition it has been revived, and we can experience the cosmic reality within ourselves and in all humanity.

### ***Footnotes***

1. In English, most nouns form their plural by adding a final ‘s’, but this is not the case in Sanskrit. In order to maintain the integrity of the Sanskrit sounds, therefore, we have in most cases not added the English ‘s’ to indicate the plural of a Sanskrit noun. Although this means that the singular and plural forms often appear identical, the distinction should be clear from the context. In a few cases (such as *Ṛishis*, *Devatās*, and *Rākshasas*), we have included a final ‘s’ to avoid confusion.
2. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 334–341 and pp. 348–352.
3. See textbox ‘[The Meaning of Family Relations in the Context of the Rāmāyaṇ](#)’.
4. See [Chapter XVI, The Return to Ayodhya](#).
5. See [Chapter I, Ātmā: The Absolute Level of Life](#).
6. See [Chapter I, Vedic Cognition](#).
7. हृदयत् सद्बर्गगात्राणि मनांसि हृदयानि च  
*Hlādayat sarvagātrāṇi manāṃsi hṛidayāni cha*  
(*Bāl Kāṇḍ*, 4.34)  
(*The recitation*) caused bliss in all of their limbs, their minds, and their hearts.
8. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 365.
9. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 379.
10. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VI.
11. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 379–382.



## Chapter VII

### *Bāl Kāṇḍ, Sarga 8–16*

In *sarga* 8 we learn of King Dasharath's desire for the birth of a son. This is the desire of one level of evolution for the emergence of an entirely new level. The means that Dasharath employed is to go back to the Self by performing a *Yagya*, following the *Ṛishis*' advice for living in accord with the Vedic Tradition. In this case Vasishtha is his *Ṛishi*, and it follows that Vasishtha plays a very powerful role in the structure of human physiology.

When an individual is living in tune with Natural Law and practises Transcendental Meditation, he is able to live a new life in which Rām fully guides all physiological activities, the mind, and the emotions. This kind of life leads to fulfilment on the highest level of perfection, and takes place through the effortless removal of all stress, strain, and abnormalities in the physiology—*Rākshasas*—resulting in the recovery of the kingdom of heaven within, the kingdom of Ayodhyā.

There are many elements in this *sarga* that describe significant physiological functions. The first is Dasharath's deep and subconscious desire for the birth of Rām and his brothers, Lakshmaṇ, Bharat, and Shatrughna. King Dasharath ruled for thousands of years and then suddenly felt the need for a new step of evolution. This is an example of how the totality of Natural Law eternally unfolds itself: always new, always expanded is the expression of its own holistic Self into new forms. This principle is beautifully expressed in Ṛk Veda:

नद्धद्योद्धु नद्धद्यो भद्धद्यति जायद्धुमानः

*Navo-Navo bhavati jāyamānaḥ*  
(*Ṛk Veda* 10.85.19)



*In the process of transformation, or evolution,  
it is the Totality that is reborn again and again.*

We have seen that Dasharath is present in the brainstem, mostly on the top portion called the midbrain, which is located at the transition between the brainstem and the higher brain cortical areas. His sons are located in the cerebral cortex, which is the highest level of processing in the brain, and is phylogenetically the newest and most evolved part of the nervous system.

The higher areas in the brain are called the neocortex, or new brain, as compared to the old brain, which is ruled by instincts and automated behaviour. The evolution of the higher areas enables humans to live a different life from animals. This process of evolution is depicted through the description of a specific set of procedures followed by Dasharath to ensure that Vishṇu is incarnated as Rām. As a result of these procedures, the human species was able to move from one level of Natural Law's administration by Dasharath to a new, holistic level of administration by Rām.

We can also consider this description of the evolution of Natural Law in terms of the growth, development, and evolution of individual human beings. A human infant has a very powerful administrative and organizing intelligence at the time of birth, particularly within those areas of the brain that control automatic functions, such as digestion, sleep and waking cycles, the regulation of internal temperature, etc. This enables the body to respond directly to its needs by perspiring or shivering, requesting food, etc. These basic functions are controlled by the brainstem and the midbrain.

The higher parts of an infant's cortex, however, are not yet developed. Indeed, the cognitive functions of a newborn are very limited compared to those of an adult. The difference lies in the development of the parts of the brain in which Rām resides. Dasharath's desire is for the development of these new parts, which correspond not only to Rām's birth—the emergence of the higher centres in the human nervous system—but also to the establishment of connections between the new areas of the brain and all other

areas of the body. This corresponds to Rām assuming rulership of the nervous system, which is essentially the creation of a totally enlightened physiology in which all actions and decisions are made from the cosmic level of Total Natural Law.

As we discussed in Chapter I, the human brain is capable of reflecting the field of all possibilities—it has all the structures of the organizing power of Natural Law within it in the form of both *Devatās* and *Rākshasas*, as well as other types of beings mentioned throughout the Rāmāyaṇ. These structures, however, must be completely developed, and their connections with other structures in the brain must also be fully established and maintained. When modern scientists assert that individuals only utilize a small part of their mental potential, it is because all of the possible connections between the structures in the human brain have not been properly established.

From this perspective, Dasharath’s desire for a son expresses the need to establish proper connections and pathways between Rām and the rest of the physiology. Only when these connections are established can Rām assume sovereignty over the entire physiology. The complete rulership of Rām corresponds to the state of enlightenment, in which the display of Natural Law is at the highest possible level.

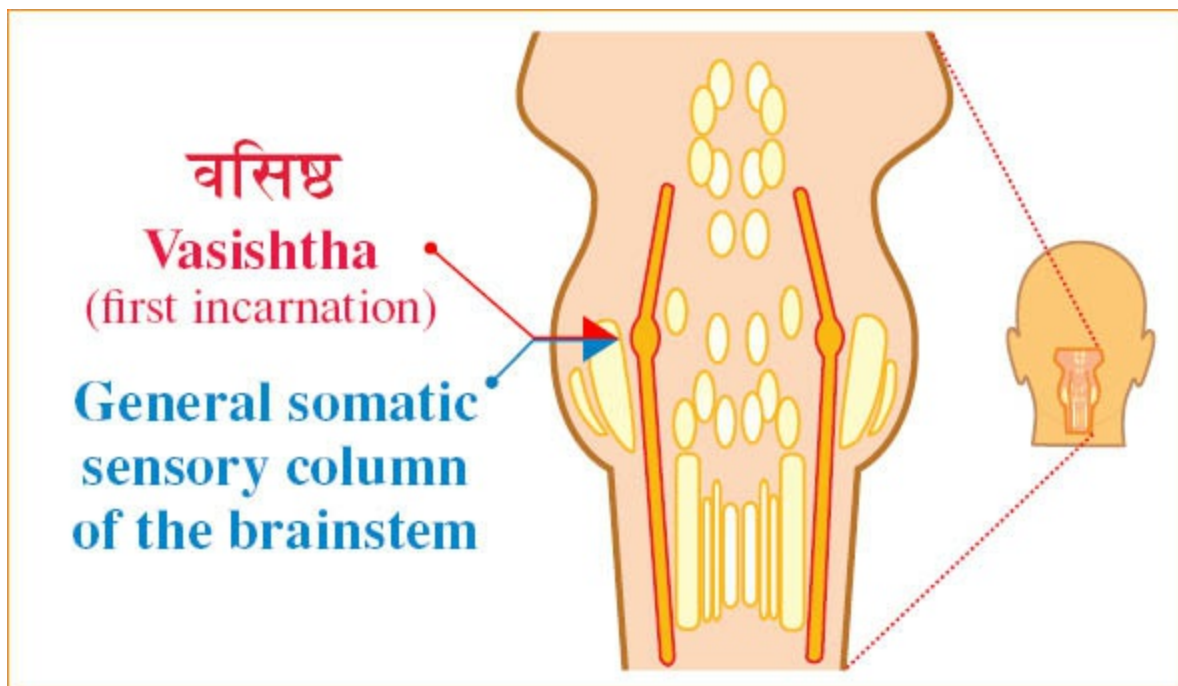
After expressing his desire, Dasharath summoned the *Ṛishis* who advised and counselled him. Chief among them was Vasishtha, to whom he expressed his desire for enlivening a mechanism to invoke the birth of Rām. Again we see that the ruler goes to the structures in the physiology that are related to the processing and handling of sophisticated feedback loops and homeostasis. These are the structures that correspond to the *Ṛishis*, who help the internal development of the brain to be in harmony with Natural Law.

## **The Role of Vasishtha in Human Physiology**

Since Vasishtha has a special place in the Rāmāyaṇ and throughout the Vedic Literature, let us briefly consider him in terms of his various roles and their

physiological counterparts. According to the Purāṇ, Vasishtha had several births, fulfilling a different role in each. In his first birth he was the ‘mind born’ son of Brahmā and one of the *Sapta Ṛishis* (*sapta* means ‘seven’), who correspond to the seven longitudinal columns of the brainstem. These vertical columns hold up the brain, and resemble pillars surrounded by brain tissue. This is the area of Chakravartī’s palace,<sup>1</sup> with the seven longitudinal columns serving as the inner pillars that support and sustain it. The *Sapta Ṛishis* in the brainstem also have counterparts in the universe as the seven stars of the Big Dipper, also known as the Great Bear, Ursa Major.<sup>2</sup>

In the beginning of the Rāmāyaṇ, Vasishtha was present in his first birth, and corresponded to the general somatic sensory column. This column contains nuclei, tracts, and connections to different parts of the brainstem and brain, including the mesencephalic nuclei of the trigeminal nerve as well as the spinal trigeminal nucleus. The structures and tracts within it are very important for the integration and balance of the sensations of touch and vibration, pain, heat, and cold.



**Figure 7.1 Ṛishi Vasishtha’s first incarnation corresponds to the general**

## **somatic sensory column of the brainstem.**

In his second birth Vasishtha was a *Rishi* during the reign of King Nimi. King Nimi once aspired to perform a large *Yagya* and asked Vasishtha to preside over it. Vasishtha, however, had already committed himself to preside over Indra's *Yagya* for a period of 500 years, and so asked King Nimi to wait. Nimi ignored Vasishtha's request and began the *Yagya* without him. When Vasishtha was finished with Indra's *Yagya* he came to help Nimi, but found that he had already begun the *Yagya*. This led to a disagreement and an exchange of curses that annihilated them both.

The fact that Vasishtha was responsible for Indra's *Yagya* is an indication that the focus of his organizing intelligence in this particular birth was on the mind, represented by Indra, rather than the physiology, corresponding to Nimi. Vasishtha in this birth was therefore a process related to the activity of the mind and not a physical structure, even though he had an influence on the physiology. The human mind is obviously more subtle than the physiology. If we consider the qualities of the mind and how it influences both the physiology and the brain, we can see why Indra is the king of the *Devatās*. We will examine Indra later in greater detail.

Vasishtha is responsible for integrating physiological functioning, and therefore he wanted first to attend to Indra's level, which is more subtle, before attending to the physical level represented by Nimi. When Vasishtha announced that in essence he needed to remain with the more subtle level of the mind and would later attend to the physiology, he was instructing Nimi in the proper sequence of events.



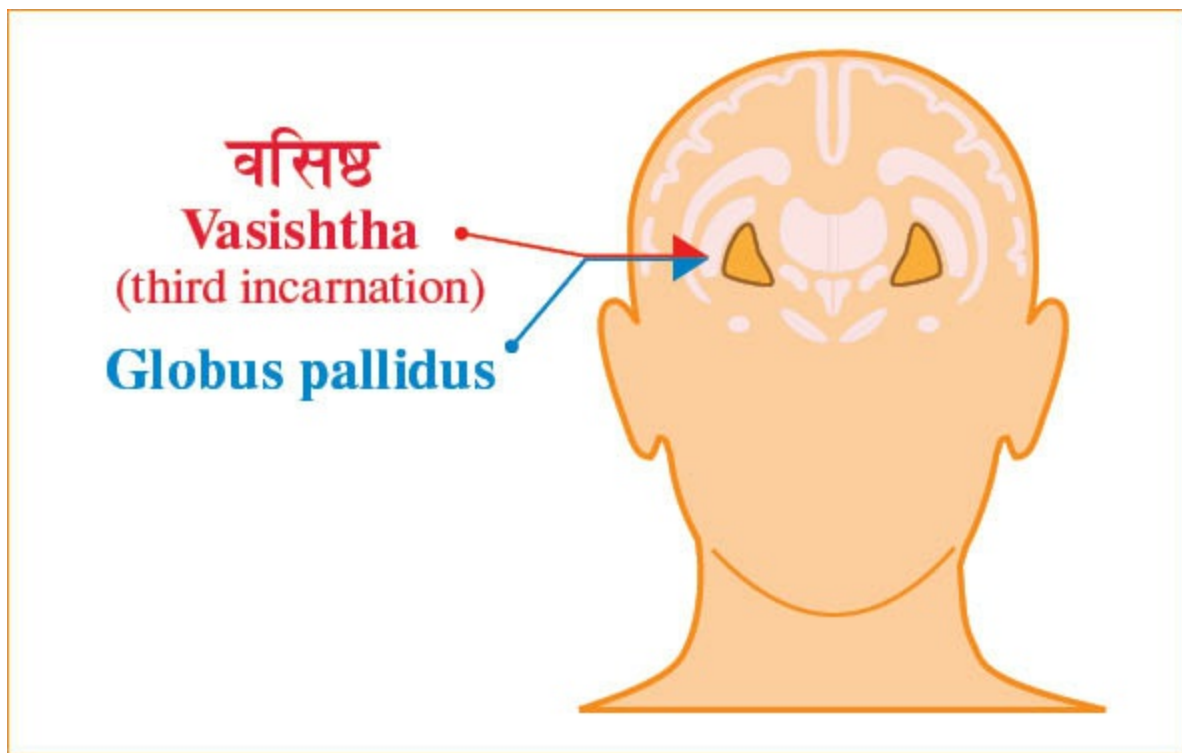
**Figure 7.2** Indra, the King of the *Devatās*, corresponds to the mind.

This reveals a principle that we will encounter many times throughout the Rāmāyaṇ: there is a proper order and sequence that must be followed. There is order in creation; there is a time for everything; there is a sequence, and sequential process is a vital feature of the human physiology. For example, a nerve impulse travels sequentially down the axon of one neuron to the synaptic gap. At this gap the electrical impulse is transformed into a chemical message, which travels across the gap. At the other side of the synaptic gap it is transformed back into an electrical signal in the second neuron. It is as if the nerve impulse transcends in the gap and then emerges again in the second nerve.

Similarly, there is a sequence of events that takes place in the evolution of life. If we do not respect the sequence, we can create difficulties for ourselves and for others. The important element in the sequence Vasishtha proposed to Nimi is that in performing the *Yagya* for Indra he was attending to a subtle level and taking care of a more holistic reality, and subsequently he would

take care of the more expressed value. Nimi's *Yagya* was not successful because he did not listen to Vasishtha's advice, and he was eventually destroyed by Vasishtha's curse. Even though Nimi's idea to perform a *Yagya* was good, he did not carry out his intentions in the proper sequence, and by ignoring Rishi Vasishtha's recommendation he undermined the outcome.

This story illustrates why it is very important to always act in tune with Natural Law, including taking advantage of the element of proper timing. This is the purpose of Maharishi Jyotish, which advises us to conduct the appropriate performances at the proper time. For each stage of life from birth onward there are Vedic Procedures, because at every stage of evolution a new reality emerges in our awareness. These procedures have profound significance even on the physiological level. At each evolutionary stage, there are Laws of Nature that can be engaged for ongoing progress and the elimination of obstacles, and the *Yagya* performances, which Maharishi has made available, enable us to gain the support of these Laws to ensure our smooth and rapid progress.





### **Figure 7.3 Rishi Vasishtha's third incarnation corresponds to the globus pallidus.**

In the story we see that Vasishtha was also annihilated, which depicts his return to the unmanifest in order to come back in a new incarnation. In his third birth, Vasishtha corresponds to the globus pallidus, an important structure in the centre of the brain that guides movement and balances all physiological activity. The globus pallidus corresponds to the planet Jupiter, or Guru as it is called in Jyotish,<sup>3</sup> the planet associated with wisdom and teaching.

In this third birth Vasishtha was born from a pot. The pot may be interpreted in two ways: first, the globus pallidus is found inside the brain next to the ventricular system. The ventricles are hollow structures that resemble a hollow pot. The second interpretation is that in the process of development, the entire nervous system—including the ventricles and globus pallidus—come from a hollow structure called the neural tube, which, in a cross section, looks very much like a pot.

These are the three incarnations of Rishi Vasishtha, but his role in the Rāmāyaṇ is ultimately as the supreme teacher, the globus pallidus, even though he is present on the other levels at the same time. There is no contradiction in the coexistence of Vasishtha's three incarnations within the physiology. All the characters from the Rāmāyaṇ, Mahābhārat, and the Purāṇ coexist in the physiology even though they appear at different times. When we look at a certain mode of physiological functioning from one perspective we see the display of the Mahābhārat and all its characters, and when we look at a different mode of functioning from another perspective we see the display of the Rāmāyaṇ and all its characters. The physiology is the total expression of Natural Law in all its aspects, silent and dynamic, and within it is every branch of the Vedic Literature.

When we consider the events of the Rāmāyaṇ from a chronological perspective, we learn that in the context of individual evolution many

characters play different roles at different times. We can also see a character as predominant during one type of activity while another is predominant during a different activity.

This is analogous to the experience of transcending during Maharishi's Transcendental Meditation and enjoying the deep inner peace and silence that is pure Being. In this experience there is no sense of friction or disturbance—it is the experience of Shiva, the awakening of *Yoga*, which is transcendental, pure Being. The quality of Shiva is predominant in this experience of silence, but does this mean that Rām is not present? Does it mean that Vishṇu, Lakshmī, Saraswatī, or Durgā are not present? No, for they are always there, but the attention is held by one quality that corresponds to a particular type of physiological functioning. As we continue to evolve, however, we will begin to appreciate the different realities simultaneously present within that silence.

Vasishtha was incarnated three times, the first occurring 10,000 years prior to the events of the Rāmāyaṇ (whatever those years mean with respect to a modern year), the second 3,000 years prior to that, and the third 2,000 years before that. Is it possible for all three incarnations to be present at the same time in our physiology? Certainly, because there is a time frame that is related to growth and evolution, and at each step there may be different physiological elements that predominate, even though all are present at all times. This is a sequential and simultaneous reality, always present within our own physiology. The totality of Natural Law is present in the physiology at every moment, even though it may appear otherwise.

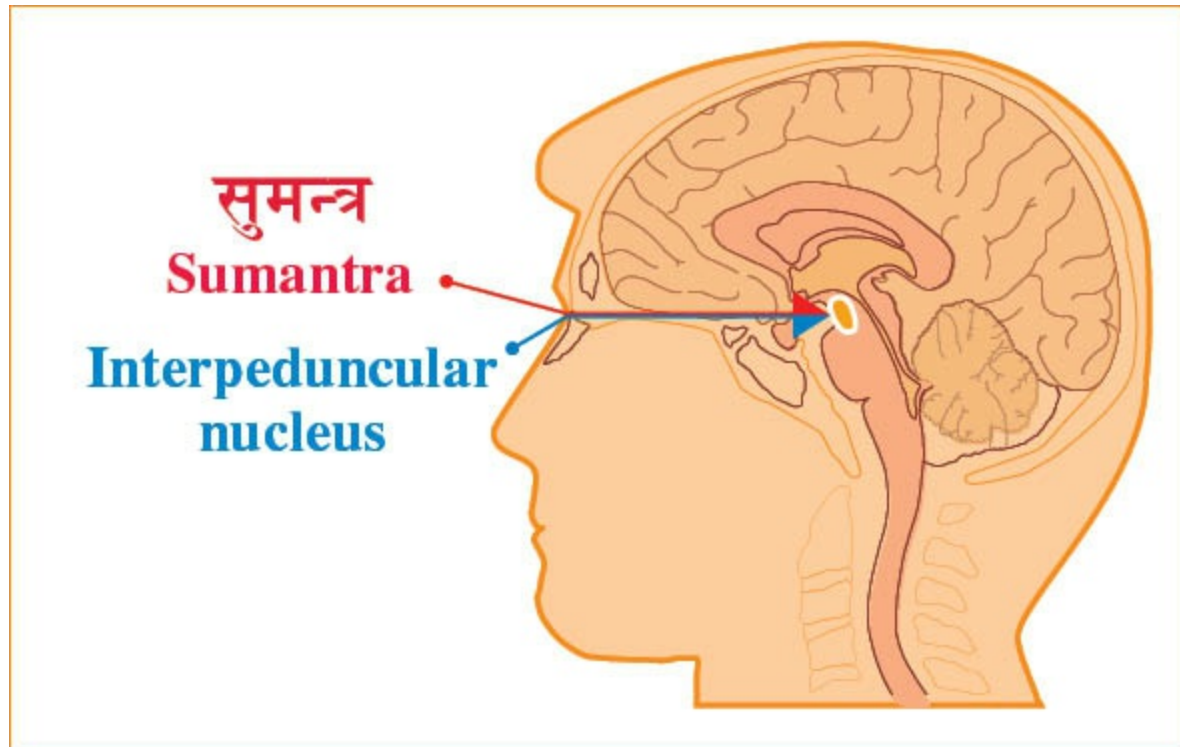
Consider the example of the development of a child into an adult. As the child's physiology develops, his brain also develops. The child has Rām within him, but Rām has not yet been fully expressed—we cannot see the full value of a wise, enlightened individual because the brain has not matured sufficiently to express Rām in thoughts and actions. But Rām is nonetheless potentially present. Vasishtha is also available at this stage in his first incarnation. He guides the proper sensory-motor integration available during

the initial stages of the child's development into adulthood. Vasishtha is also available in his second birth as he guides the growth and balance of the child's mind, with its limitations, to an adult mind. In the third incarnation Vasishtha is fully available to guide Rām as an accomplished young adult, even though he still has to gain control over the entire field of speech and action. In the same way, the flow of events in the Rāmāyaṇ provides us with an understanding of the sequence taking place in the unfoldment of the total brain, in the awakening of Rām in our physiology. It is therefore completely consistent to have different characters, or the same character in different incarnations, display the growth and development of the physiology.

### ***Sarga 9: The Yagya for Rām's Birth***

In *sarga* 9, Sumantra, Dasharath's charioteer and one of his ministers, recounted a prophesy telling how the Sage Ṛishyashṛṅga would perform the *Ashwamedha Yagya* in order to bring Dasharath a son. Sumantra related a prediction that Ṛishyashṛṅga would be lured from the forest by King Romapāda and married to Romapāda's daughter, and his presence in the capital city would relieve a drought that had afflicted the kingdom. Subsequently Dasharath would invite Ṛishyashṛṅga to perform the *Yagya* for the birth of Rām and his brothers.

Let us consider the physiological relationship between Sumantra and Ṛishyashṛṅga. Sumantra corresponds to the interpeduncular nucleus, located in the brainstem. The term 'nucleus' refers to a collection of neurons that are concentrated in a particular area. The neurons, and in particular the cell bodies of the neurons, form the grey matter of the brain. Nerve fibres coming from the cell bodies form the brain's white matter, which carries nerve impulses that are integrated in the grey matter. These neurons can either be dispersed or clumped together into nuclei.<sup>4</sup>



**Figure 7.4 Sumantra, the charioteer of King Dasharath, corresponds to the interpeduncular nucleus in the midbrain.**

The grey matter in the brainstem has many different nuclei. The interpeduncular nucleus, for instance, lies between two large pathways, or branches, called peduncles. These two pathways are like pillars carrying many of the fibres from the top of the brain downward to the brainstem. The interpeduncular nucleus is the nucleus that sits near or between the peduncles.

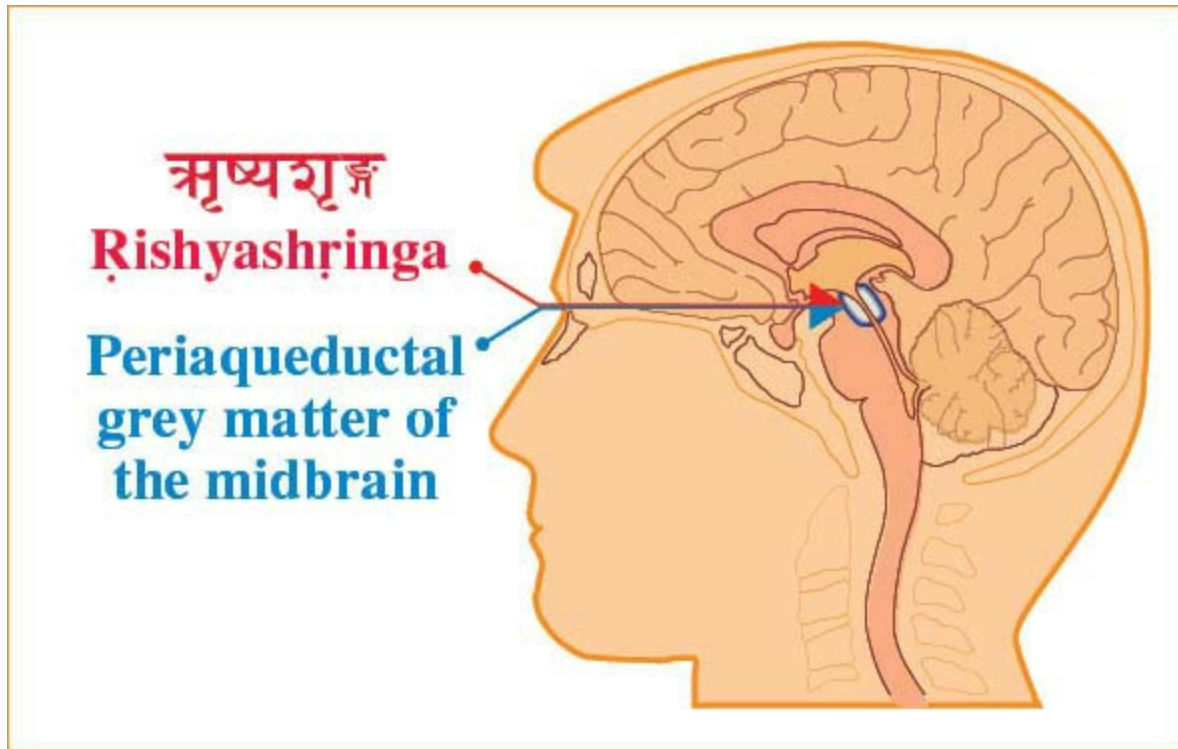
The interpeduncular nucleus receives fibres from different parts of the midbrain, where Dasharath is present, and is connected to pathways from the limbic system that are concerned with visceral and behavioural functions. The limbic system is related to emotions, desires, and the guiding of the senses outward. The interpeduncular nucleus is like a connecting pathway that takes messages from one place to another, bringing them, for example, from the midbrain area to the limbic system. This is comparable to

Sumantra's role as charioteer, in which he transported Dasharath from one place to another. Later we will see that Sumantra also accompanied Rām when he first entered the forest in exile, which again describes a specific activity of the interpeduncular nucleus.

Sumantra advised Dasharath to approach Rishyashringa and request that he perform the *Ashwamedha Yagya*. Sumantra later explained that he had received this advice from Rishi Sanatkumār, who told him the story of Rām's future birth and the significant role Rishyashringa would play.

Rishyashringa is located in a special area of the brain and brainstem called the periaqueductal grey matter of the midbrain. To better understand how it corresponds to Rishyashringa, let us briefly examine the periaqueductal grey matter and the hollow area it surrounds.

The entire nervous system is hollow in its centre. In the brain this hollow structure is called the ventricular system, or ventricles, and in the midbrain it is called the cerebral or brainstem aqueduct, while in the spinal cord it is called the spinal aqueduct or central canal. There are several large ventricles located in the centre of the brain, and several more as it descends into the brainstem. This hollow, silent structure is like the seed of a banyan tree, which is hollow and empty inside and yet is the source of the whole tree. In the same way, there is a totally transcendental, inner, empty, silent structure in the body from which the entire physiology is ultimately built.



**Figure 7.5 Ṛishi Ṛishyashṛiṅga corresponds to the periaqueductal grey matter of the midbrain.**

Surrounding the hollow centre, or aqueduct, is a layer of grey matter called the periaqueductal grey matter. *Peri* means ‘around’, and therefore *periaqueductal* means ‘around the aqueduct’. Thus periaqueductal grey refers to the grey matter, or neurons, that remain around the aqueduct at the brain’s centre. The brain’s centre is a hollow area that represents infinite silence. Ṛishyashṛiṅga’s presence in that area explains his close connection to silence.

The periaqueductal grey matter has different functions depending on where it is present. At the level of the midbrain, where Dasharath is situated, the periaqueductal grey matter controls reproductive behaviour, speech and vocalization, as well as some aspects of pain control. It also has the ability to control aggressive behaviour and eye movement. It is important to note that the interpeduncular nucleus (Sumantra) connects to midbrain areas (Dasharath) as well as to the midbrain periaqueductal grey matter



(Ṛishyashṛīṅga). This confirms that Sumantra, as Dasharath's charioteer, connects to Dasharath while maintaining a special role in bringing Ṛishyashṛīṅga to Dasharath.

Ṛishyashṛīṅga's father, Vibhāṇḍak (corresponding to the pontine periaqueductal grey matter), is the son of Kāshyap,<sup>5</sup> and was an ascetic *Ṛishi* who represented the value of silence—the silence of Shiva. Vibhāṇḍak also placed his son in a field of total silence, isolating him from everything. Through his silence Ṛishyashṛīṅga gained the power of *Purusha*, the power of pure Being. When there was a drought, King Romapāda was willing to do anything to bring Ṛishyashṛīṅga to his kingdom, because he knew that Ṛishyashṛīṅga's mere presence would restore life in accord with Natural Law and bring the cycles of Nature back to their orderly patterns.

This story reminds us of the importance of the presence of the *Ṛishis* in society. A *Ṛishi* can single-handedly enliven the evolutionary qualities of Natural Law in a society and in the environment. King Romapāda persuaded Ṛishyashṛīṅga to leave the forest and marry his daughter Shāntā,<sup>6</sup> and when Ṛishyashṛīṅga did so, he naturally restored order and peace to the capital city.

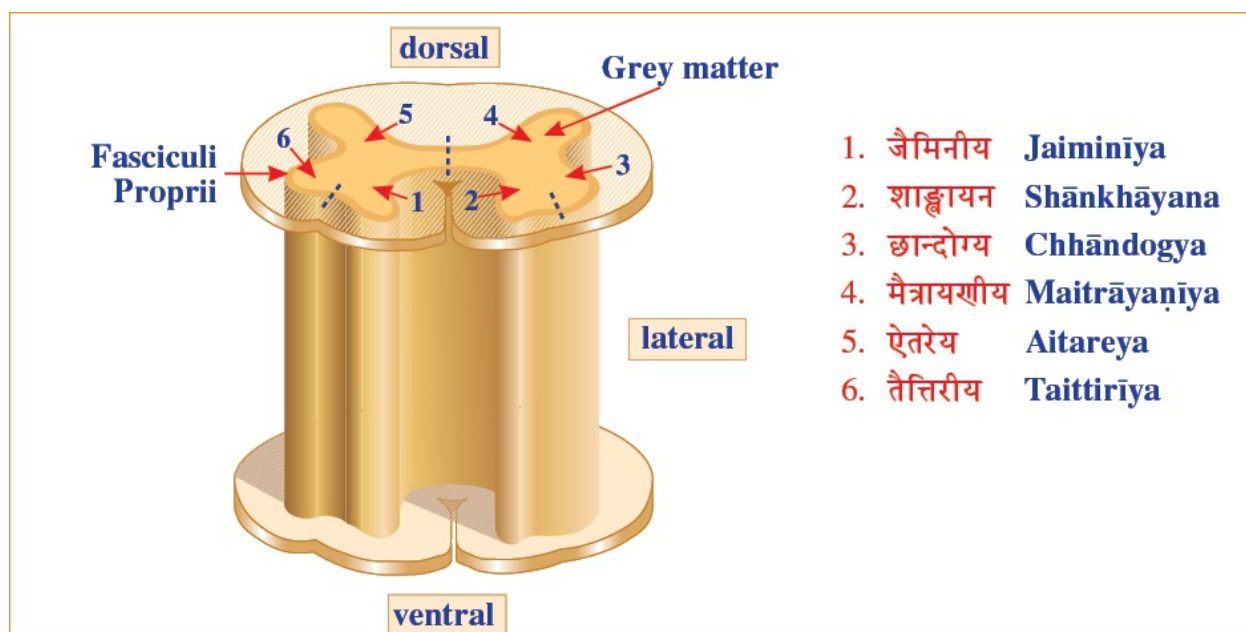
Ṛishyashṛīṅga, therefore, represents both silence and its inherent dynamism. He was deeply established in the power of silence through years of deep meditation in the forest, and he displayed his dynamism in his *Yagya* performance. It was necessary for him to have the power of silence, which is expressed in a new physiological structure, in order to awaken Vishṇu in the form of Rām. Vishṇu, as Maharishi explains, is the value of dynamism. We will discuss this in greater detail in the next *sarga*.<sup>7</sup>

## ***Sarga 10: The Story of Ṛishi Ṛishyashṛīṅga***

*Sarga 10* provides us with further details of the events surrounding Ṛishyashṛīṅga's departure from the forest in order to marry Romapāda's daughter Shāntā. The forest in which Ṛishyashṛīṅga and his father were living corresponds to areas in the brainstem that have an arborisation of

neurons—neurons that appear like many-branched trees. In *Human Physiology: Expression of Veda and the Vedic Literature*, we examined an aspect of the Vedic Literature known as Āraṇyak, which means ‘forest’. Āraṇyak corresponds to the fasciculi proprii, which are nerve fibres that interconnect the descending and ascending fibres—the outgoing and incoming impulses of the nervous system.<sup>8</sup>

Maharishi described the primary significance of Āraṇyak as the stirring of the infinity of अ (A), Totality. Therefore, the forest in which the *Rishis* were living is Āraṇyak, where there is the stirring of infinity, dynamism, within silence. This stirring corresponds to intense neural activity within the fasciculi proprii (Āraṇyak), where all the inputs and outputs of information are connected. The inputs bring the sensory impulses to our brain, to our attention, while the outputs generally go to muscles that are responsible for moving the physiology and directing different types of behaviour and speech. In between are the integrating structures and feedback loops that correspond to the *Rishis*.

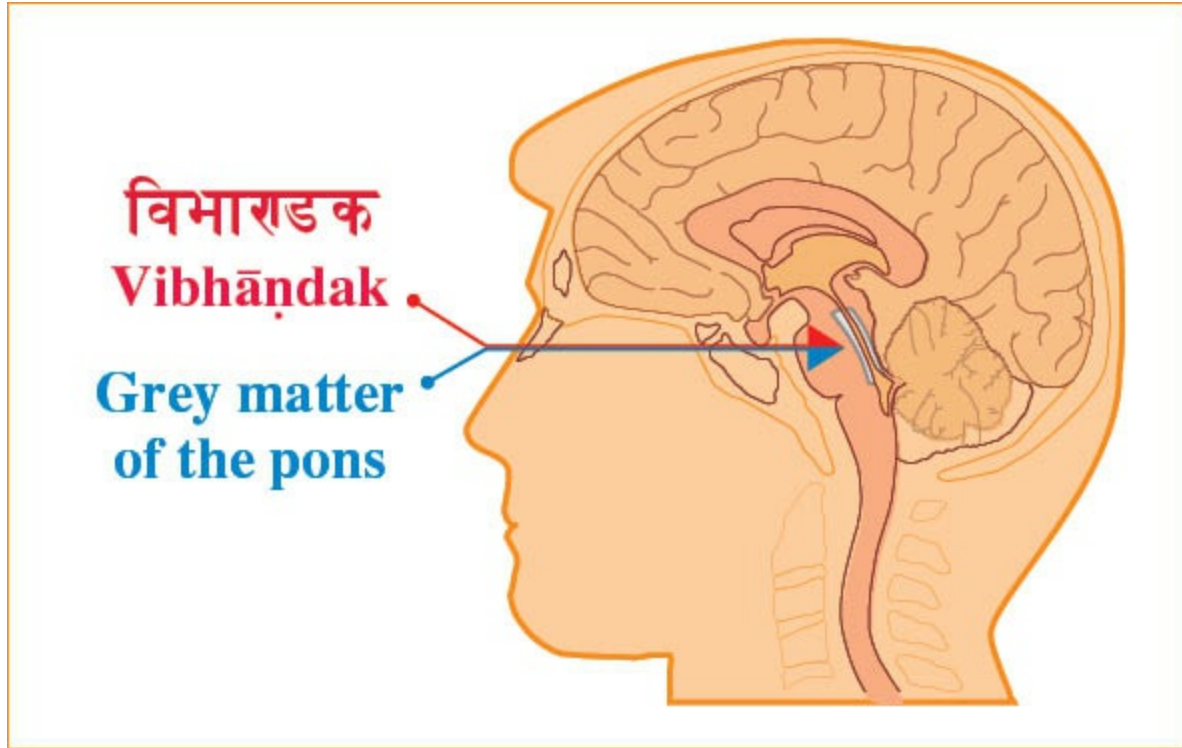


**Figure 7.6** The 6 sets of fasciculi proprii around the grey matter of the spinal cord correspond to the 6 main books of Āraṇyak.

The fasciculi proprii (Āraṇyak) are spread throughout the spinal cord, but are nevertheless segmented, or have groupings with separately identifiable functions. This is the reason we can conclude that there are many *Ṛishis* in the physiology, while at the same time stating that all *Ṛishis* are ultimately one—there is one group of fibres called the fasciculi proprii, yet these fibres have their own specific functions in the physiology.

In the Rāmāyaṇ, as in every aspect of life, there are functional interconnected units that work together to perform a similar type of activity, or that belong to one and the same family, enterprise, etc. These have a unified focus, yet have components, parts, individual characteristics, or specializations that might be very different from each other. For example, Kāshyap's son Vibhāṇḍak is the father of Ṛishyashṛiṅga. Vibhāṇḍak is the periaqueductal grey matter of the pons, and his son Ṛishyashṛiṅga is also in the periaqueductal grey matter, but of the midbrain area. Kāshyap is also in the same line but his corresponding area is more caudal (lower). The midbrain area is higher than the pons (the pontine area). They are one family and are obviously all of the same Vedic family tradition (Gotra) with the same Vedic duties and performances, yet there are differences in their activities and influences that depend upon the needs of the time and circumstances, as well as on the level of evolution of the society or individuals with whom they must interact. This is also consistent with our finding that in a genealogy, or from a phylogenetic perspective, the younger (the sons and grandsons) are generally located higher in the nervous system, and correspond to newer developmental structures. We have already seen the example of Rām and his brothers being higher in the brain than their father Dasharath.

The periaqueductal grey matter surrounding the central hollow tube therefore undertakes different functions depending upon the level of its location. At the bottom of the brainstem, in an area called the medulla oblongata, it has a particular function, but if we examine it on a slightly higher level in the pons we find that it has a different function. And if we look higher still, to the midbrain, we discover that it has other functions.



**Figure 7.7 Ṛishi Vibhāṇḍak corresponds to the grey matter of the pons.**

If we view these structures from an evolutionary perspective, we will see that the lower parts are present before the higher parts develop, as though the higher parts are the sons of the lower ones. In this way we see a family relationship represented in the physiology, with the periaqueductal grey at the lower level corresponding to the grandfather, the periaqueductal grey in the middle corresponding to the father, and the periaqueductal grey at the midbrain level, the higher level, corresponding to the son. This logic can be applied to other relationships within the Rāmāyaṇ and physiology.

Returning to the story of Ṛishyashṛiṅga, we recall that he moved from his silent life in the forest to the city of King Romapāda, where he performed the Ashwamedha *Yagya* to bring about the birth of King Dasharath's sons. This refers to the enlivenment of the interconnection of the neurons between the midbrain area and the higher brain. Typically *Yagya* performance enlivenes the Laws of Nature that administer the universe in specific ways and for

specific needs, to help ensure success in the fulfilment of one's desire, or Sankalpa. These Laws are called *Devatās*, and are located in the higher brain areas. Some of the *Devatās* were introduced in earlier chapters. This is how a *Ṛishi* connects higher and lower areas through his performance of *Yagya*. From this perspective we can say that one who is not using his full brain potential has not enlivened Rām within his brain.

As soon as we begin practising the Transcendental Meditation and TM-Sidhi programme, the brain begins to awaken, the connections increase, and we start to unfold more of the brain's potential—we are enlivening Rām. Rām is always present within us, only needing to be fully enlivened. Thus the birth of Rām refers to the development of new areas of the brain and the enlivenment of their connections to the whole brain and the whole physiology.

### ***Sarga 11: King Dasharath's Request for Ṛishi Ṛishyashṛinga***

*Sarga 11* recounts how King Dasharath requested Ṛishi Ṛishyashṛinga's presence from King Romapāda, so that Ṛishyashṛinga could perform the necessary *Yagya*. Upon King Romapāda's acceptance, Ṛishyashṛinga and his *Patnī* Shāntā proceeded to Ayodhyā, where they were welcomed with conch shells and drums, and with great joy and eagerness.

Romapāda also known as Lomapada corresponds to the habenula, a group of nerve cells near the pineal gland which create a small eminence on the dorsomedial surface of the thalamus. The pathways of the habenula form a relay system in which impulses from the brain are transmitted to efferent nuclei of the brain stem. One of the pathways is through the fasciculus retroflexus to the interpeduncular nucleus and other areas of the midbrain.

This *sarga* beautifully describes the mechanisms through which one structure of the nervous system sends messages to others, which in turn transmit the message to other structures. In some cases these messages are conveyed back

to the original structure through feedback loops. In the Rāmāyaṇ, these feedback loops correspond to messengers dispatched to gather information.

Feedback loops play a critical role in the physiology, as information is constantly referred back to inner structures within the human brain. These structures then analyse and create balance on the basis of the information that has been transmitted. This same process is evident in the following sequence of events: Dasharath speaks with his charioteer Sumantra, then requests Ṛishyashṛinga's presence from Romapāda on Sumantra's advice; Romapāda accepts the request; and finally Ṛishyashṛinga arrives in Ayodhyā. This describes how an input moves from the area where Dasharath is located in the physiology to Romapāda's location. From there the input travels to the periaqueductal grey matter, Ṛishyashṛinga, which sends an impulse to the midbrain, Dasharath.

Communications between different parts of the brain facilitate the formation of new connections between those parts. For example, Dasharath, the midbrain, asked Ṛishyashṛinga, the periaqueductal grey matter, to bring about the birth of Rām. This results first in the creation of new connections within the brainstem, and then in the formation of new connections between the brainstem and higher areas of the brain.

Ṛishyashṛinga is located within the brainstem in areas containing neurons that function as gateways of consciousness, which can act as filters to control the excitation or inhibition of communication between structures within the brain. For example, during sleep these structures produce a filter, or gate, that blocks the input from the eyes and ears to the brain. When we are sleeping, the gate is completely closed and sound can actually vibrate in the ear without our becoming aware of it. The eardrum, or tympanum, may be vibrating, and inside—in the middle ear—the tiny bones, the ossicles, may be vibrating, but there is a dampening system that inhibits sound from reaching our conscious mind. As a result we are able to continue sleeping.

These deep structures in the brainstem play an important role in modulating



awareness in different states of consciousness. When we are not in touch with our inner Self we can become overshadowed by thought, emotion, or activity. To counteract this tendency, Maharishi emphasizes that we should enjoy a spontaneously subject-referral level of awareness, rather than one that is object-referral. When we are object-referral our attention is focused outward, on the object of perception, and we lose contact with the inner Self. One potential result is that we tend to judge our life on the basis of others' opinions. It is important that our inner Self be the ruler and the guide of our lives, and for this we must be in harmony with our inner Self.

The *Rishis* enable us to be open to our Self, depending upon the degree to which they are enlivened within us. The *Rishis* have the ability to modulate our consciousness, to let us sleep, dream, or to wake up, with the full awareness of our cosmic Self, with our total potential enlivened. Whenever an area such as the midbrain wants to activate a connection between itself and another area, it cannot accomplish it directly—it must engage the structures in the brain corresponding to the *Rishis*, which help regulate specific functions and rhythms; they open or close the gateways of perception and allow us to 'see' deep into the silence within.

This is the beautiful tradition of Vedic Knowledge, and when we follow its teachings, the blessing of that tradition—the knowledge of higher states of consciousness—is given, received, and integrated into our own consciousness. If we ignore the Vedic Tradition we lose the effectiveness of its teaching, and we will not be able to produce the powerful and appropriate effects that come from this beautiful knowledge. The knowledge of transcending must be connected to its source. Without this connection, it will not be effective and will not lead us to the ultimate goal of evolution. In our modern scientific age Maharishi has enlivened and restored purity to the ancient tradition of *Yagya* performance and made them available to anyone with unfulfilled desires. One might want love and happiness, better health, wealth, spiritual advancement, or even an end to suffering—the fulfilment of any unfulfilled desire—and the *Yagya* will help us achieve our goal.

Maharishi's *Yagya* programme begins with a Jyotish consultation by an expert in Maharishi Jyotish, in which appropriate *Yagya* performances are prescribed. One participates financially and also by expressing a specific intention, or desire—a *Sankalpa*. These are some of the steps required for the *Yagya* to succeed. If King Dasharath, the glorious incarnation of Kashyap, was required to follow precise procedures and instructions from the *Ṛishis* for his *Yagya* to succeed, we can see why we should be attentive to the guidance of Maharishi and the Holy Tradition of Vedic Masters, so that our *Yagya* will be performed in accord with Natural Law, and therefore be successful.

Physiologically, we see that the midbrain, or Dasharath, is building direct connections with the higher cortical areas, where Rām is located. For these to be lively, other neuronal structures in the brainstem must also become involved. If the 'gates of perception' are closed by these structures, one simply falls asleep and nothing is perceived. Indeed, these gateways can be so tightly closed that one becomes comatose, with no ability to see, hear, taste, touch, or smell. In this comatose state the brain may appear to be healthy and nourished, but with these brainstem gateways completely closed there can be no conscious awareness.

The areas in which these gateways are located in the brainstem have various scientific terms, such as the reticular formation and the reticular activating system. Within them are nuclei, or *Ṛishis*, which perform actions in a particular way at a particular time. Dasharath's approach of Romapāda, and Romapāda's subsequent agreement for *Ṛishyashṛinga* to perform a *Yagya* for Rām's birth, describe a process in which specific connections are being activated and established within the brain. In this case, the periaqueductal grey matter and all its surrounding structures are invoked and allowed to perform functions that open specific gates and avenues, which then lead to the enlivenment of the connection between the midbrain and the brain. This chain of events allows the awakening of the full brain—it allows Rām to come to life and function as he does throughout the *Rāmāyaṇ*.

We have seen how each *sarga* brings out new values of physiological mechanisms. The story of King Romapāda and *Ṛishi* Ṛishyashṛiṅga's arrival from the forest is told for a particular reason, and every detail of the story has its own physiological significance. We might wonder, for example, why Ṛishyashṛiṅga brought his *Patnī* Shāntā with him. We have seen earlier that ladies are related to the cardiovascular system, and Shāntā represents the anterior choroidal artery. Her accompaniment of Ṛishyashṛiṅga describes how attention placed upon a specific part of the physiology enables the flow of blood and nourishment to move in that direction.<sup>9</sup> The anterior choroidal artery supplies deep seated brain structures that are related to planets that play an important role in the timing and performance of *Yagyās* (see *sarga* 12).

When an area of the brain is activated, the flow of blood to it increases. For example, when we hear a word, the blood flow to the part of the brain concerned with hearing increases. When we read a word, even without saying or hearing it, blood flow increases to a different part of the brain. When we speak a word, the blood flows to yet another part, and when we read a word aloud—so that we are speaking, hearing, and seeing it simultaneously—then more than one area in the brain is activated.

Those who limit themselves to one type of activity develop only the corresponding part of the brain, whereas the whole brain develops with the practice of the Transcendental Meditation technique. This is supported by research demonstrating that the practice of Transcendental Meditation increases both blood flow to the brain as well as the coherence of the brain's electrical activity. In addition, improvements in intelligence, creativity, mental efficiency, fluid intelligence, and many psychological factors also suggests that the regular practice of Transcendental Meditation establishes new connections that allow for a more integrated and holistic style of brain functioning.

An increase in blood flow will enliven the areas of the brain in which Rām and his brothers are located, leading to the unfoldment of the brain's full

potential. Their mothers, corresponding to the arteries supplying the cerebral cortex, produce this increased flow. The mothers are the embodiment of all women, who bring nourishment to different parts of the body. Again both *Purusha* and *Prakṛiti*, silence and dynamism, are evident—the silent intention and desire along with the dynamic quality of nourishment, indicating that a metabolic process is taking place that will lead to the establishment of new connections and new structures requiring oxygen and glucose, which usually come through the arteries. These mechanics are evident whenever there is a focus of activity, either in the brain or in activities that result from the brain’s activities, and result in an increase in blood flow.

Ṛishi Ṛishyashṛṅga also corresponds to silence, the infinite *Purusha* quality. *Purusha* within itself allows *Prakṛiti* to perform. *Prakṛiti* performs on the basis of *Purusha*. *Purusha* is the power behind the action, without which there can be no life in accord with Natural Law, no evolution. It is the source of all energy, and contains both dynamism and silence. In the Rāmāyaṇ, men and women reveal the play and display of Natural Law in the form of *Purusha* and *Prakṛiti*.

## ***Sarga 12: The Importance of Timing in King Dasharath’s Yagya***

At the proper time Dasharath approached Ṛishyashṛṅga and asked him to perform a *Yagya* to help him obtain sons. All the assembled *Ṛishis* agreed that this was the proper course of action. The verses of this *sarga* illustrate the importance of proper timing, both as a general principle and in the context of human physiology.

There are cycles in the performance of neuronal activities, such as in the specialized tissues in the heart that naturally maintain the pattern of polarization and depolarization leading to the contraction and relaxation of the heart muscles. The maintenance of the many diverse large and small cycles in the physiology is essential for life.

There are many other examples of the importance of timing in the Rāmāyaṇ. If someone approached a *Rishi* at an inappropriate moment he might be cursed, or if a *Yagya* were to be performed at the wrong time it could have a negative result, as we saw in the discussion of *Rishi* Vasishtha and King Nimi in *sarga* 8. In this *sarga*, however, King Dasharath approached *Rishi* Rishyashringa at the right moment. The span of time since Rishyashringa had come to him and established a relationship with him was the exact period required for the periaqueductal grey to build its connection with the midbrain area.

Maharishi Jyotish tells us the exact time at which a *Yagya* should be performed. Physiological cycles are also very precise, responding to inputs from the environment, from the cycles of day and night, from the stars and planets, and from seasonal changes. The body's inner cyclicity responds precisely to all these inputs.

It is highly important that every activity takes place according to the exact cyclicity of Nature, for it is the physiological cycles that keep us in tune with Natural Law. Dasharath approached Rishyashringa at just the right time to ask the appropriate question, and Rishyashringa responded in the proper way. The significance of this *sarga* therefore lies in highlighting the importance of timing and cyclicity, both of which are essential in Nature's activities on every level of creation.

### ***Sarga 13: Preparations for the Ashwamedha Yagya***

Sarga 13 depicts the preparations for the *Ashwamedha Yagya* and describes the precision with which the necessary ingredients and preparations were organized. It also identifies those who were invited to attend, and the attitudes and respect accorded to each. Eventually everyone in the kingdom—from the wealthiest to the very poor—was invited, with due respect and appropriate accommodation.

Significantly, King Dasharath bestowed upon *Rishi* Vasishtha the role of

principal organizer. This describes how every aspect of the physiology is involved in the performance of a *Yagya*—every aspect of the mind and intellect, every aspect of physical activity. To build up the different pathways and awaken the whole brain, everything must be alerted—the physiological conditions must be ideal. Everyone was invited to the *Yagya* because the awakening of Rām is the awakening of the entire physiology, and it is essential for every part to participate in Rām’s full enlivenment. When the text says ‘wealthy and poor’, it means that everything on every level must be connected to Wholeness when Rām is fully awake. Everyone must participate, from the original intention, the *Sankalpa*, through the entire *Yagya* performance, to enable Rām to rule all of Ayodhyā, all of the physiology. This is the essence of *sarga* 13.

### ***Sarga* 14–15: The Incarnation of Vishṇu as Rām and His Brothers**

One of the most important elements of the story of Rām is his birth as the incarnation of Vishṇu. The glories of Ayodhyā were beautifully described in earlier chapters along with the great virtues of King Dasharath’s ministers, but following these descriptions we learned the significant fact that there was no heir to the throne, and the lack of a son weighed heavily upon Dasharath’s mind.

During the course of Ṛishyashṛinga’s performance of the *Ashwamedha Yagya*, the *Devatās* approached Brahmā to request the destruction of Rāvaṇ, the king of the *Rākshasas*, along with his demon hordes, who were obstructing the performance of *Yagya*. Brahmā in turn implored Lord Vishṇu to incarnate on Earth to subdue Rāvaṇ. We see thus that Lord Vishṇu was born to restore balance in life by preventing Rāvaṇ and his *Rākshasas* from disturbing the *Yagya* performances, which strengthened and nourished the *Devatās*.

Lord Vishṇu incarnated as the four sons of Dasharath, including Rām and his three brothers. These four sons correspond to four major areas of the brain.



The presence of Dasharath's four sons in these areas is particularly interesting because it illustrates how the wholeness of the brain, embodied by Vishṇu, is divided into four values, each taking care of a different aspect of the physiology.

At the beginning of the Rāmāyaṇ, the four aspects of Lord Vishṇu appeared to be separate and differentiated, especially, as we shall see later, with respect to Kaikeyī's plot to exile Rām and place Bharat on the throne. The essence, however, is always oneness—the brothers never regarded each other as separate. Even though Vishṇu was born to four realities with Rām as his fullest incarnation, the four brothers behaved as one even though located in different places. When Bharat ruled in Rām's absence, he ruled on the basis of Rām's presence, placing Rām's sandals on the throne to demonstrate that Rām was still the ruler.

This theme of unity between the brothers is evident throughout the story, and when Rām finally ruled Ayodhyā he assumed the role of Vishṇu, completing the unification of their original separation. This shows how the brain is organized into different areas with specific functions and anatomical structures even at the cellular level, yet functions in a unified manner that enables the physiology to perform perfectly in tune with the holistic value of Natural Law.

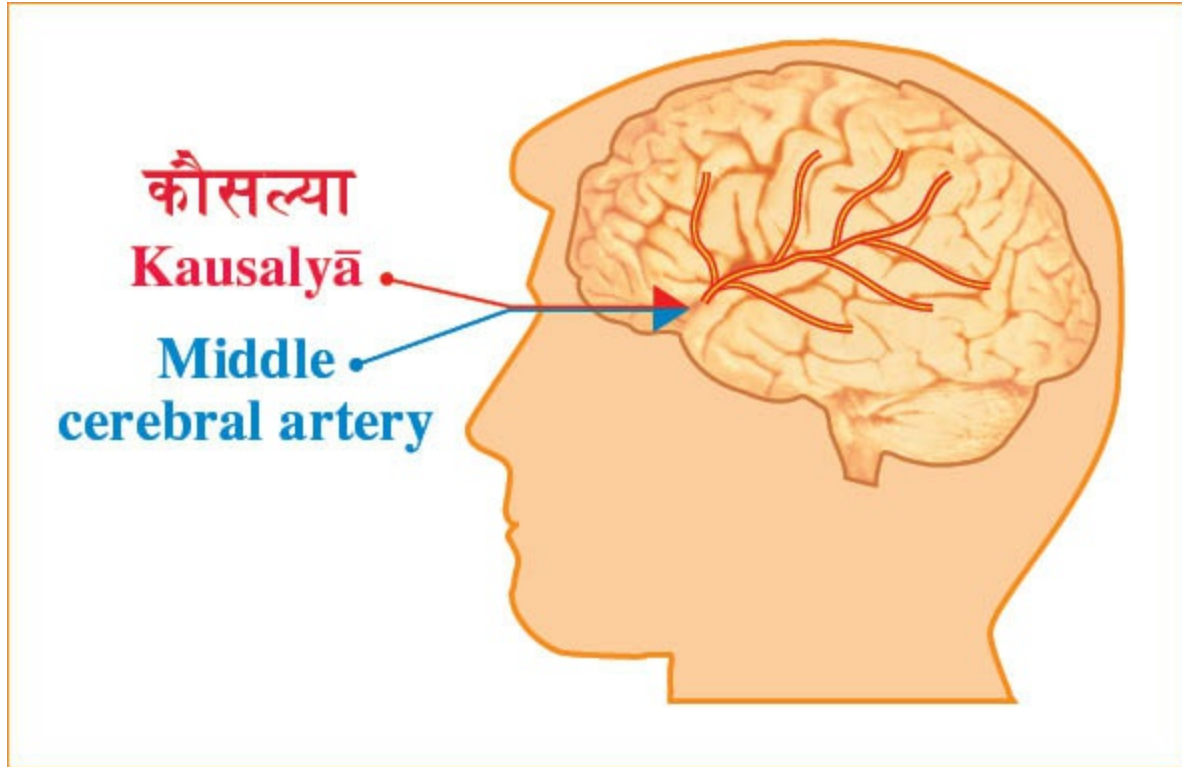
### ***Sarga 16: King Dasharath's Patnī are Given Pāyas***

In *sarga* 16, a messenger from Vishṇu emerged from the sacrificial fire and gave Dasharath a golden pot containing *pāyas* (milk boiled with rice and sugar), instructing him to give it to his *Patnī*—Kausalyā, Kaikeyī, and Sumitrā. King Dasharath is present within the brainstem, where Chakravartī is also found, and in this area there is a grouping of arteries that form what is called the circle of Willis, consisting of three large arteries that connect with each other and form a circle around Dasharath's area.

The circle of Willis corresponds to the three *Patnī*<sup>10</sup> of Dasharath, and we can

conceptualize them holding hands and forming a circle. The circle of Willis gives rise to three branches—the middle cerebral artery, the anterior cerebral artery, and the posterior cerebral artery—each of which corresponds to one of the queens. The middle cerebral artery corresponds to Kausalyā, the anterior cerebral artery to Kaikeyī, and the posterior cerebral artery to Sumitrā. These arteries supply nourishment to the areas of the brain that correspond to their children—Rām, Bharat, Lakshman, and Shatrughna. These three arteries sustain the entire brain.

The areas covered by the three cerebral arteries have a phylogenetic correspondence in that the middle cerebral artery is the most ancient, and is the artery that nourishes the first born and oldest of the four sons. It is also the artery that appears earliest in the development of the brain. Across different species we find that this artery is an extension of the internal carotid artery. The middle cerebral artery is the largest and most complex of the cerebral arteries. It covers the central areas of the brain that lead to behaviour, sensation, speech, and complex functions such as planning and action in accordance with Natural Law, as well as the adjustment and refinement of specific actions. These are the areas of the brain in which Rām is present. Thus it is appropriate that Kausalyā, who gave birth to Rām, nourishes the part of the brain that covers the physiological structure corresponding to Rām.



**Figure 7.8 Queen Kausalyā corresponds to the middle cerebral artery.**

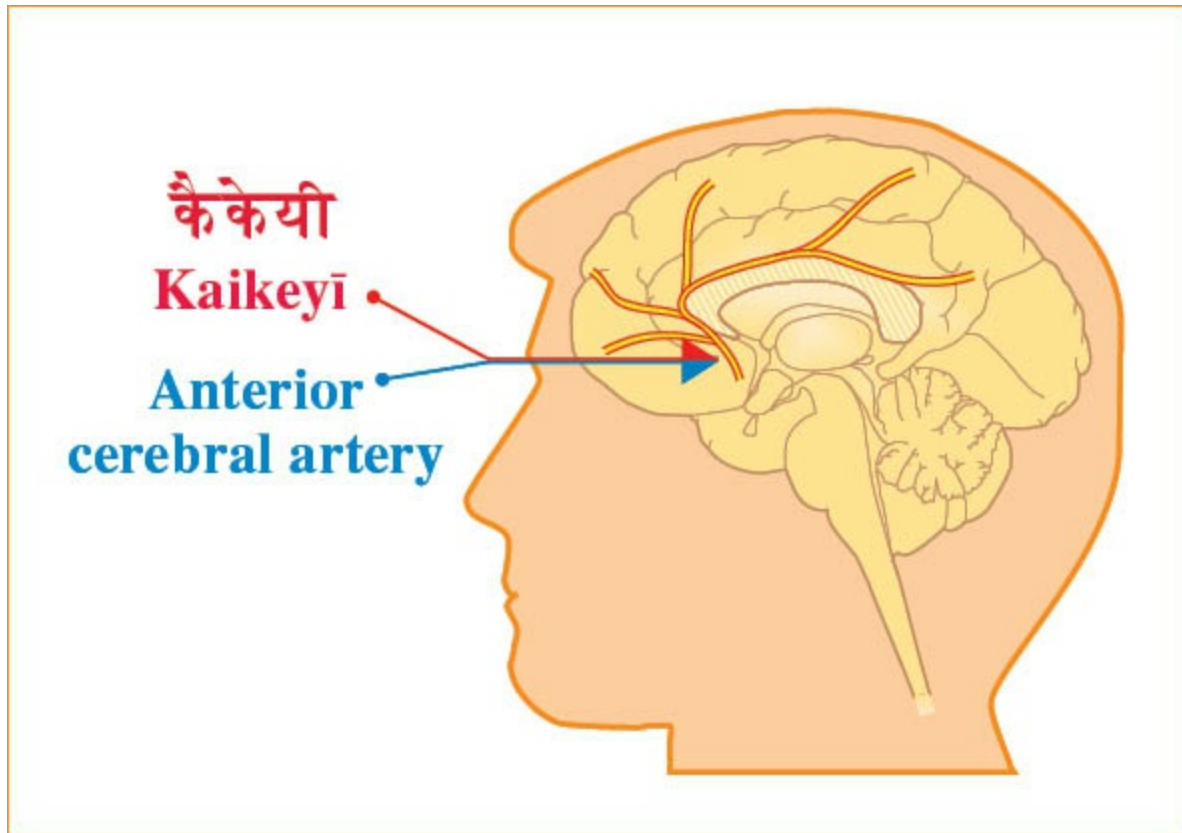
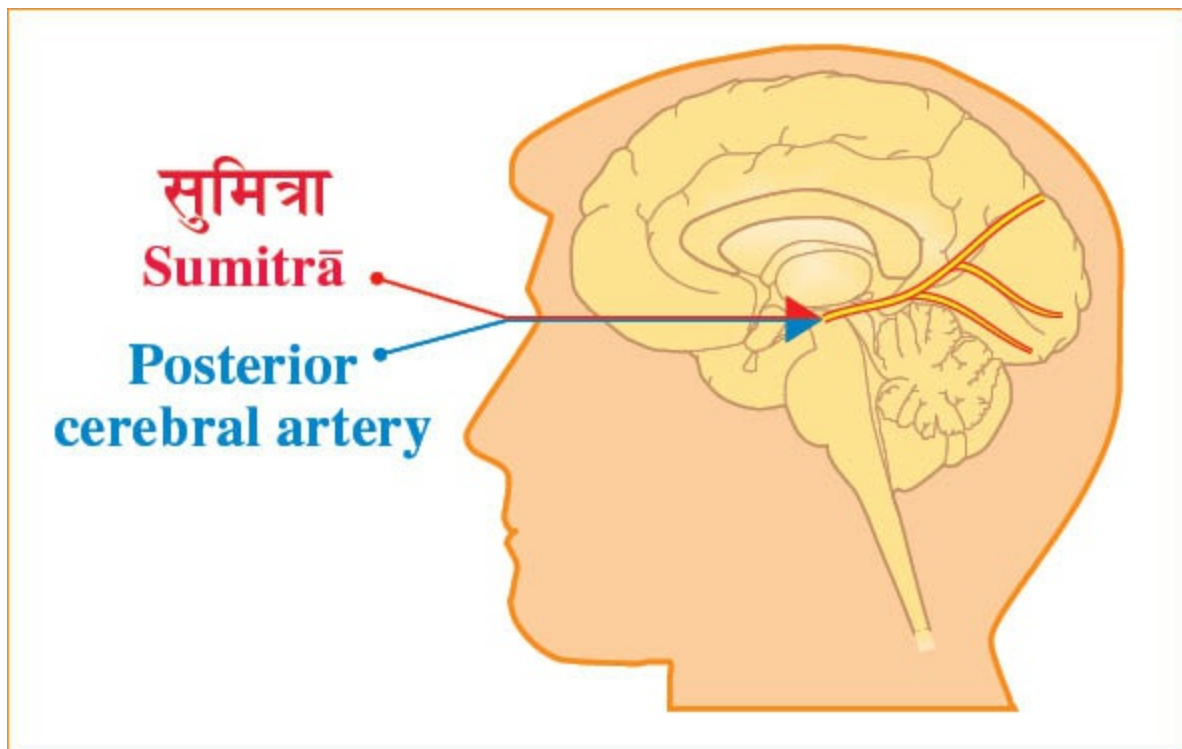


Figure 7.9 Queen Kaikeyī corresponds to the anterior cerebral artery.

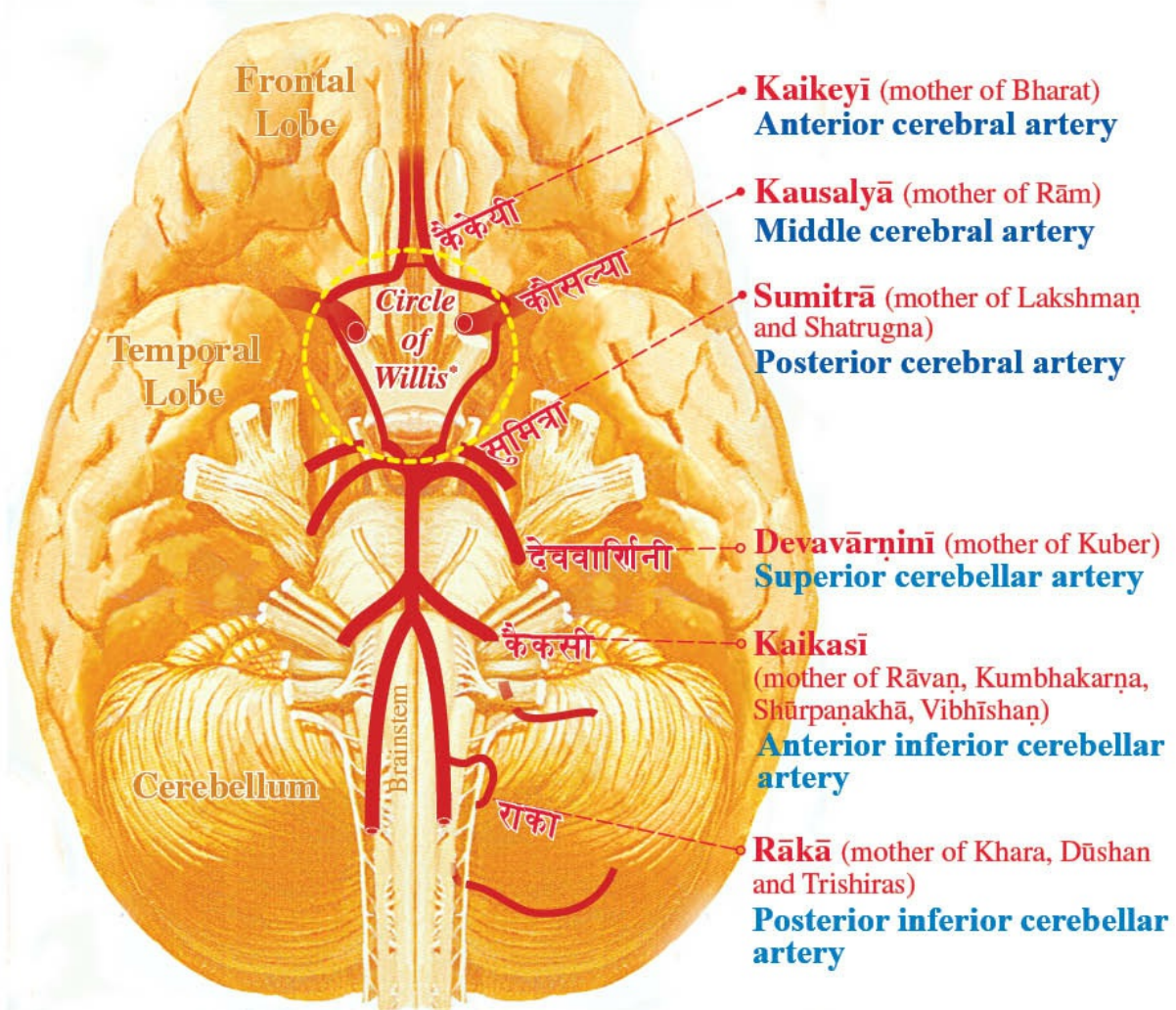


**Figure 7.10 Queen Sumitrā corresponds to the posterior cerebral artery.**



## The Mothers of Rām, Rāvaṇ, and Their Brothers and Sisters

### The Main Arteries of the Cerebrum and Cerebellum



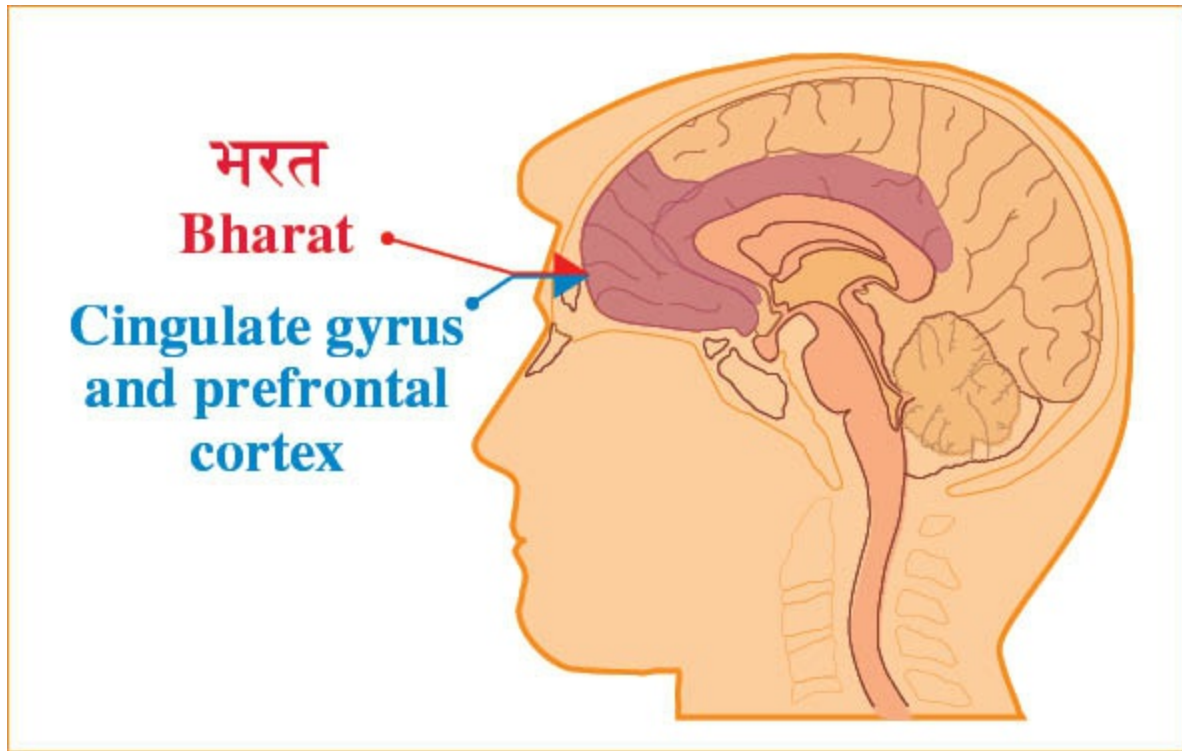
Brain and brainstem with cranial nerves  
and arteries seen from below

\* The Circle of Willis is a circle of communicating arteries at the base of the brain that distributes blood to the different areas of the brain.

**Figure 7.11** The main arteries of the brain correspond to the mothers of Rām, Rāvaṇ, and their brothers and sisters (see also [Chapter XII](#), and [Chapter XV](#), [here](#) and [here](#)).



Kaikeyī, Bharat's mother, corresponds to the anterior cerebral artery, which covers the cingulate gyrus and prefrontal areas of the brain where Bharat is located. Sumitrā, the posterior cerebral artery, covers most of the occipital lobe where Lakshmaṇ is located, as well as parts of the temporal lobe where Shatrughna is located.



**Figure 7.12 Bharat corresponds to the cingulate gyrus and the prefrontal cortex.**

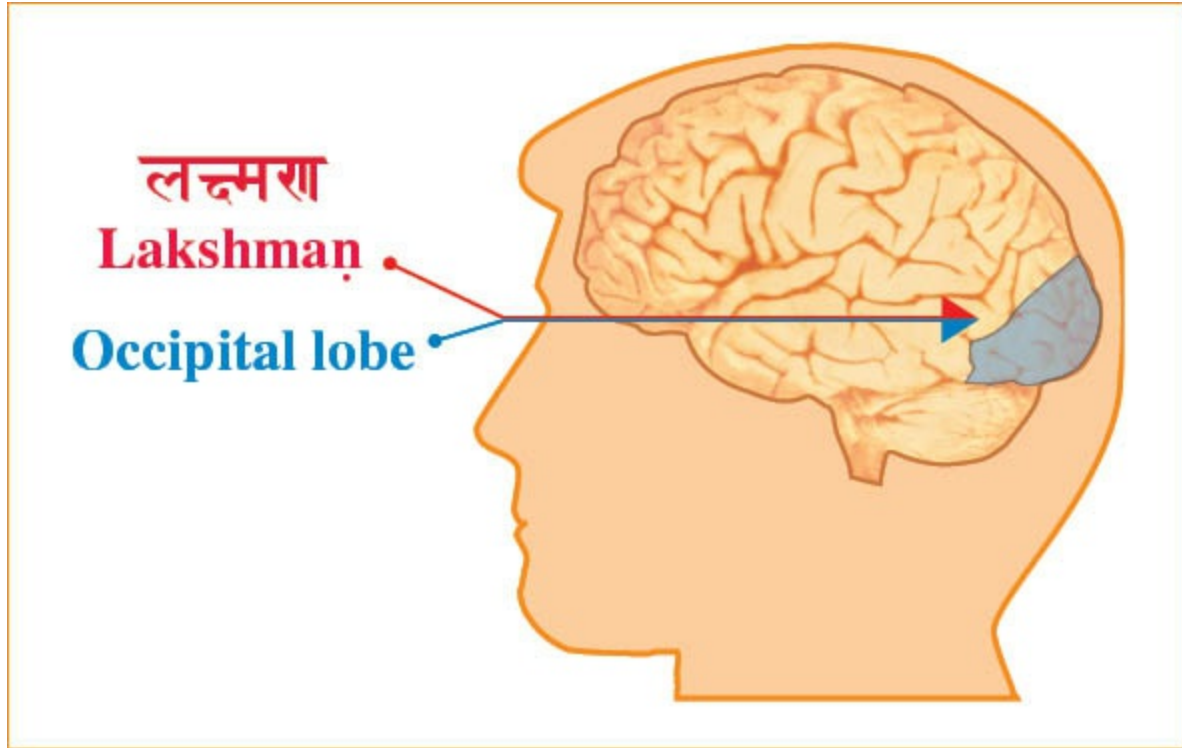
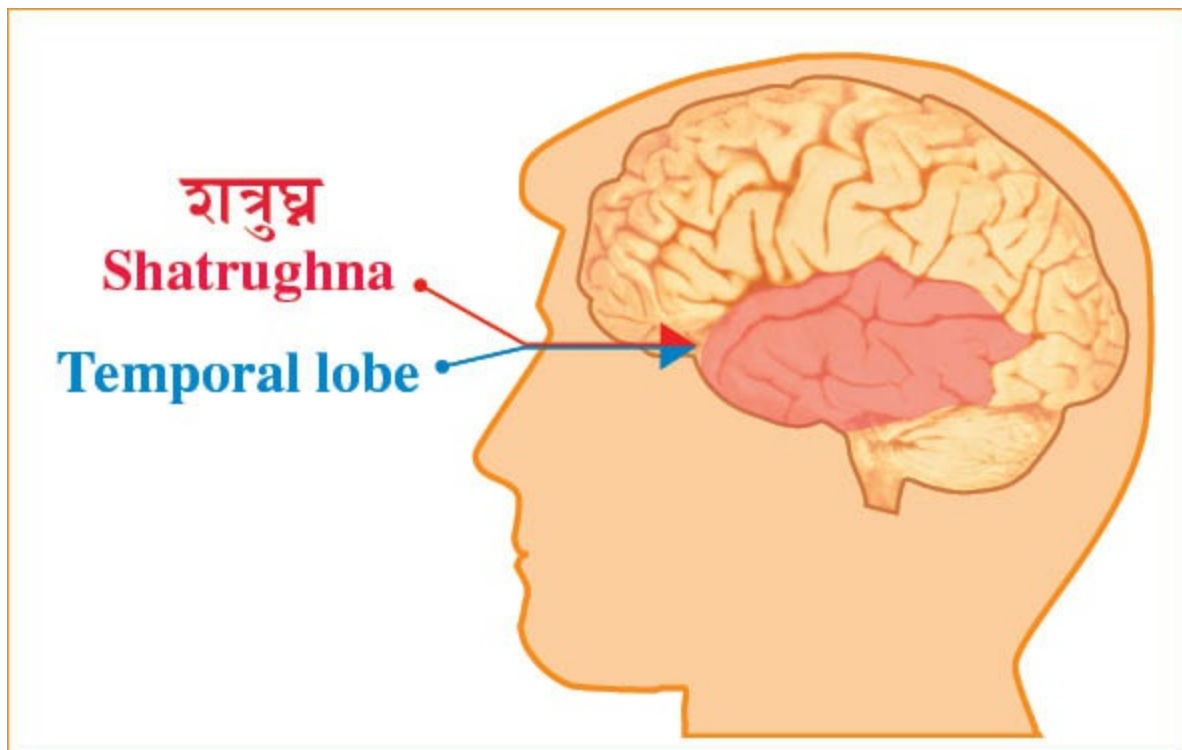


Figure 7.13 Lakshman corresponds to the occipital lobe.



### **Figure 7.14 Shatrughna corresponds to the temporal lobe.**

We can also see the relationship between the brothers within the physiology. For example, Bharat covers a part of the brain that is related and directly connected to the area in the brain in which the feet of Rām are located, which is usually depicted as the feet of the homunculus in the inner folds of the brain—along the inside of the superior sagittal sulcus not far from the corpus callosum. This is a very interesting physiological connection because Bharat always bowed to Rām’s feet, and even placed Rām’s sandals upon the throne to demonstrate that Rām was the true ruler.

Bharat also corresponds to the prefrontal cortex, the seat of the ‘conscience’, which is consistent with his constant mindfulness that the kingdom was actually under the rule of his older brother Rām even though he (Bharat) held the throne. Another example of the physiological correspondence of the brothers’ relationship is seen in the fact that Lakshmaṇ went with Rām to the forest while Shatrughna stayed behind with Bharat.

The distribution of the *pāyas* corresponds to the distribution of nutrients from the arterial system by way of the carotid arteries. These nutrients are first distributed into the middle cerebral artery and then to the anterior and posterior cerebral arteries. Each *Patnī* received a specific portion of the *pāyas*, corresponding to the strength and volume of nutrients that are distributed in the brain by their respective arteries.

### **Footnotes**

1. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 379.

2. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 379–382.

3. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 118.

4. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 116–121. Another larger type of neuron grouping is called a ganglion. Ganglia inside the brain are called basal ganglia because

they sit at the base of the brain. The basal ganglia correspond to the planets of the solar system.

5. Kāshyap is a descendant of Kashyap.

6. According to the Yoga Vasishtha and other versions of the Rāmāyaṇ, Shāntā is Dasharath's daughter and Rām's sister, though she was raised by Romapāda like a daughter.

7. These few examples of the correspondence between the characters in the Rāmāyaṇ and the detailed anatomy within our physiology reveal how by knowing the Rāmāyaṇ we can immediately obtain practical knowledge of the physiology. Medical doctors spend many years specialising in order to comprehend the intricate and complicated interactions of the anatomical structures in our physiology, and now we see them embodied in the beautiful story of the Rāmāyaṇ. It is, therefore, highly significant that the Rāmāyaṇ can be studied by anyone.

8. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 212.

9. Whenever a new connection is made or a new structure is awakened, a metabolic process must take place. There are two types of metabolic processes, catabolic and anabolic. Catabolic processes are those that break down and digest nutrients. The body's enzymes digest food products by cutting them into small pieces, small molecules, so that they can be absorbed into the body and metabolized, distributed, and utilized for various functions. Anabolic processes utilize the small molecules from digestion and metabolism to help form new structures. When a connection forms between two neurons, it utilizes these small molecules.

Everything in our body is made from these small molecules. For example, the hand, with its muscles and bones, is made of large and complex molecules built from these smaller molecules. In addition most anabolic processes utilize oxygen to power the metabolic pathways. Oxygen, glucose, and other small molecules from the blood are vital to the processes that allow the formation of all new connections in the nervous system.

10. See textbox entitled '[The Meaning of Family Relations in the Context of the Rāmāyaṇ](#)'.



# Chapter VIII

## *Bāl Kāṇḍ, Sarga 17–26*

### *Sarga 17: The Birth of Many Heroes*

In order to assist Rām in restoring balance and destroying negativity, a multitude of beings incarnated on Earth. As the Rāmāyaṇ progresses we will encounter many of these great heroes, including Hanumān, Jātāyu, Sugrīva, Vāli, and Jambavān.

The birth of the heroes along with Rām and his brothers describes Rām’s enlivenment within the cortex, which begins to activate and influence the entire brain and every part of the physiology. The incarnations of heavenly beings is expressed in different parts of the physiology through the activity of different nuclei and neurons in the central nervous system.

The awakening of the brain at the moment of birth results in an immediate and simultaneous awakening of every part of the body. Even though Rām has not yet dispensed with all the *Rākshasas* and placed the physiology in perfect order, it is enough that the brain is enlivened and that the body’s support systems are activated.

Thus the incarnation of celestial beings describes the enlivenment of the entire physiology—the awakening of all its parts. For example, the many *Vānara* (monkey-like beings) born at the time of Rām’s birth correspond to the many hormones that are stimulated at the time of birth, which move throughout the body relaying messages and returning information. Hanumān, the most powerful of the *Vānara*, embodies the entire hormonal system, which we will discuss in detail in Chapter XIII. The birth of other heroes, such as Sugrīva, Nīla, etc., signifies the establishment of connections between the cortical level of the brain and the rest of the physiology, leading to the transmission of information through the release of neurotransmitters at synapses, as well as through the circulation of hormones in the bloodstream.

## ***Sarga 18: Rām's Birth***

Amidst joyful celebration and with auspicious signs in the heavens, Rām was born, soon followed by his three brothers, Lakshmaṇ, Bharat, and Shatrughna. From their earliest years, a particularly intimate relationship was evident between Rām and Lakshmaṇ, as well as between Bharat and Shatrughna. As we will see over and over again, their interconnections are vividly illustrated by the relationship between their corresponding structures in the brain. The connection between Rām and Lakshmaṇ is evident in the relationship between the supplementary motor cortex and the occipital cortex, in which Lakshmaṇ is present. We can also see these interconnections when we examine each of the mothers and the cerebral arteries to which they correspond. This short *sarga* comments on the beautiful relationship between the brothers, corresponding to their relationship in the brain.

## ***Sarga 19–22: The Meeting with Ṛishi Vishwāmitra***

When Rām was a young boy, the great Ṛishi Vishwāmitra arrived in Ayodhyā and asked King Dasharath to allow Rām to accompany him to dispose of some *Rākshasas* that were interfering with his *Yagya*. Dasharath was stunned by the request, feeling that his son was too young, and he responded by offering to lead his army to protect the *Yagya* as long as Rām could remain at home. Angered by Dasharath's reluctance, Vishwāmitra insisted that Rām accompany him. After some time Vasishtha intervened and convinced Dasharath that under Vishwāmitra's protection, not only would Rām be protected but he would succeed, and the entire enterprise would offer valuable training.

We can understand this discussion in terms of human brain development. The relationship between Rām and his father is the relationship between the still developing brain, Rām, and the brainstem, Dasharath. The brainstem area maintains control over vital functions such as breathing, heart rate, and blood pressure, and therefore Dasharath's role is to control these vital functions. His sons represent the development of the new lobes of the brain—the neocortex



—which is responsible for higher mental functions and for maintaining homeostasis within the physiology in a holistic way. The neocortex, the location of the four brothers, takes into consideration all the complex activities required for us to interact most efficiently and effectively with our environment. Rām was called upon to protect the *Ṛishis* to ensure that the *Yagya* performances were completed properly, so that the *Devatās*, the administrators of Natural Law, would continue to be nourished and strengthened.

Dasharath's objection that Rām was too young and tender can be interpreted as a concern for the developing brain that seems too inexperienced to undertake the role of balancing and maintaining order in the physiology; it is the fear of a parent, sitting in the brainstem, worried that the focus of these newly formed structures in the neocortex is going to be diverted from the established internal functions of the system. The *Rāmāyaṇ* reveals, however, that total development of the brain arises in such a manner that it can perform highly skilled actions in accordance with the holistic value of Natural Law, while taking into consideration all possible influences both from inside and outside the physiology.

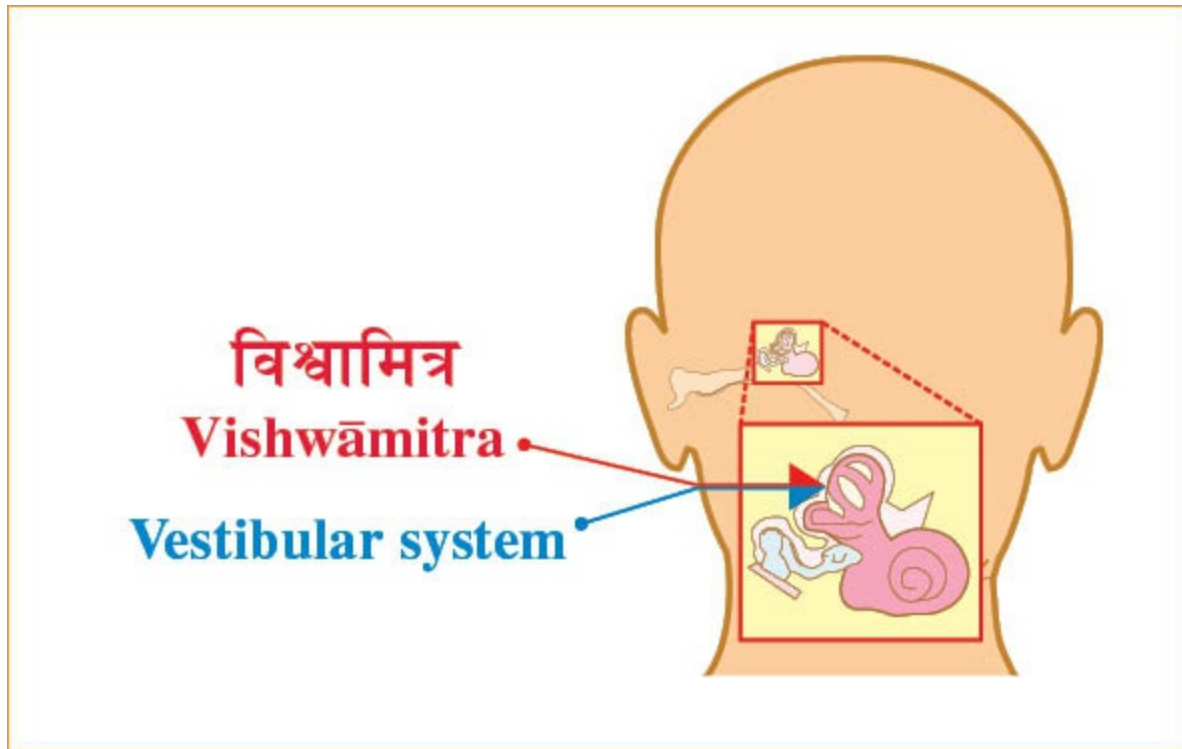
The brainstem, including the midbrain where Dasharath is present, takes care of basic physiological functions. In a newborn infant, the midbrain area controls such functions as feeding, digestion, monitoring and adjusting internal temperature, and even crying when something is needed. A growing child obediently follows his parents' directions, neither thinking of the future nor planning and executing difficult tasks—life simply consists of learning, playing, and reacting. The child is still controlled by brain areas that are perfectly adapted to protect him and which allow him to look to his parents for guidance, protection, and happiness, but which are not yet fully developed. When these parts begin to become more active and commence taking over responsibilities, they may seem like a threat to the lower parts of the brain. When higher brain functioning begins to take control, the child may still make mistakes. We commonly say that someone is behaving

‘childishly’, meaning that he or she is behaving unreliably, that their brain is not mature. Such a person has a limited ability to think and act, and, like a child, may therefore harm himself or others. The act of learning creates increasingly more connections in the brain, which enable more appropriate behaviour and increased safety.

It is natural and appropriate, therefore, for Dasharath to be afraid for his son. The inner body’s instincts have not yet relinquished control of the physiology to the higher brain areas. It is as if Dasharath is sitting within us, wondering if our brain is developed enough for him to release control to the higher areas, or if he should hold back, restricting us to the level of instinct and basic functions until we are sufficiently mature to make wise decisions.

It is unfortunate that there are many people in society today, some in responsible governmental positions, whose brain has not yet been fully developed. Rām is not lively in their physiology and they are guided by fear-based relationships. We could say that *Rākshasas* still roam the forest of their consciousness, and they are not capable of holistic responsibility. When Dasharath asked if he should let Rām take on such a level of activity, he was asking whether that part of the physiology was sufficiently developed to take control of important decisions and actions.

Vishwāmitra was Rām’s first teacher, and corresponds to the vestibular system, located inside the ear canal. The vestibular system is important for maintaining balance and movement, especially balance of the head and coordination of the eyes, which allow us to move without falling and hurting ourselves. For a child, learning to walk is complex because it is necessary to adjust both the muscles that need to contract as well as those that must relax, and then to integrate the two. Whenever we walk, our muscles are continually performing very intricate and complicated activities that require precise adjustments.



**Figure 8.1 Rishi Vishwāmitra corresponds to the vestibular system.**

In the same way, in the process of standing up from a prone position, certain muscles must counteract the force of gravity. If the pull is too strong we could fall forward, and therefore mechanisms in our balancing system activate the muscles in the back of the legs and the back of the body. This holds us back to the proper degree to prevent us from falling. Indeed, various fine adjustments occur every second that we are standing, walking, or sitting. We are not conscious of such adjustments—walking and moving are simple, natural routines that the brain learns at a relatively young age.

Similarly, if we want to shoot an arrow, ride a bicycle, or play a musical instrument, there must be constant coordination between the sense of sight and the sense of position in space. We have receptors inside our joints and muscles that send information to the brain, telling it the exact position of the body in space. This information must be integrated along with visual information in order for us to make accurate movements with varying degrees of grace and power. It is Vishwāmitra, the vestibular system, who

accomplishes this refined integration.

Another important aspect of the vestibular system is its role in movement. Whenever we shift our head to the right or left, we become aware of the direction in which we are moving, because receptors in the neck muscles and in the joints of the neck area indicate that the position has changed. An even more delicate part of the vestibular system is the semicircular canals present inside the ears, which are able to detect changes in rotational movements. This system is composed of three canals orthogonal to each other on either side of the head, a total of six canals under Vishwāmitra's control.

Although they are located within the ears, these canals are not related to hearing. They are filled with fluids, and when we move, small waves form inside the canals that indicate our exact position. This is the reason that we sometimes have the sensation that a room is still turning when we spin around many times and then stop and open the eyes. In actuality the room is not turning, but it seems to be moving because the fluids inside the ears are still moving from the previous rapid motion. If we stop and allow some time to pass, the room will no longer appear to be turning.

When there are problems in this area, one often experiences vertigo, a type of dizziness in which there is the sensation of spinning or swaying while the body is stationary. This may occur as the result of an infection in the middle ear that affects the semicircular canal system.

Vishwāmitra's *Yagya* corresponds to the functioning of the vestibular system, which maintains balance. If there is a problem with the vestibular system, it means that *Rākshasas* are disturbing the *Yagya* performances and there is a need for Rām to control the *Rākshasas*. Vishwāmitra's request therefore represents the vestibular system calling upon the newly formed lobes of the brain to connect with it, so that it can be trained for higher action.

Dasharath's hesitancy describes the brainstem's concern that these areas are too new and should remain focused on the maintenance of homeostasis within the internal functions of the physiology.

It is especially appropriate that it was Vishwāmitra who was Rām's first teacher, since the phenomenon of balance is one of the first areas to develop in the brain. We know that before almost any other undertaking a child must learn to walk, and in order to accomplish this the child must develop balance. For this the child must gain a clear perception of the surroundings as well as understand the concept of what it means to stand upright. All these considerations require the activity of the higher brain, which sends messages to different muscles to organize them and enable them to function properly. As we grow older, we develop a variety of skills, such as those necessary to be a piano player, a car driver, a skier, a pilot, etc., all of which require the development of balance, which is related to the vestibular system.

In order to teach Rām, it was necessary for Vishwāmitra to remove him from his home life. The home, or inner life of the kingdom in this case, refers to the inner functioning of the physiology. Initially, Rām was involved solely in the inner environment of his father Dasharath—the midbrain—which controls basic functions involved in the physiology's inner activities. His first outer activity requires the help of Vishwāmitra's area, the vestibular system. We understand the fear and anxiety of the midbrain that the brain may not be ready yet to extend its influence outside. However, Rām's growth had reached the point where he was ready.

Vasishtha convinced Dasharath to allow Rām to accompany Vishwāmitra, which again illustrates the importance of the *Rishis*' role as advisor, creating harmony and lending assurances. Vasishtha also assumed the role of teacher who had raised his pupil's education to its proper level. Vasishtha, as we saw in Chapter VII, is located in several parts of the physiology: he is in one of the sensory columns inside the brainstem, and is also located in the globus pallidus, one of basal ganglia that plays an important role in the balance of action. Thus Vasishtha is found deep within the brainstem, while at the same time wielding significant influence from the basal ganglia. This is the reason that he was able to convince Dasharath to be confident in Vishwāmitra's ability to train his sons—to allow the cortex to develop connections with the

vestibular system in order to fully develop the control of balance, so that any action would naturally take into consideration the entire value of Natural Law.

When Vishwāmitra brought Rām to his *Āshram* for training, he presented him with special arrows and weapons called *Astras*, and taught him how to use them. These events are related to the development of mind-body coordination in the brain. The vestibular system controls balance and precision in action, such as the ability to shoot an arrow and even such refined activity as the performance of a *Yagya*. It includes the ability to have complete control over the limbs, so that they are properly balanced and coordinated with vision and attention. This ability to perform highly precise action is also based upon higher values of consciousness, such as logic, clear thinking, discrimination, and a broad awareness capable of taking into consideration the totality of Natural Law. Rām needed to develop the ability to perform action at its highest possible level, in accord with Natural Law.

These *sarga* (19–22) express what transpired during the first phase of Rām’s education with the help of the vestibular system, Vishwāmitra. As Rām further developed, and as the *Rāmāyaṇ* broadens in scope, Rām continued creating connections with other areas of the body in order to establish a perfectly balanced physiology.

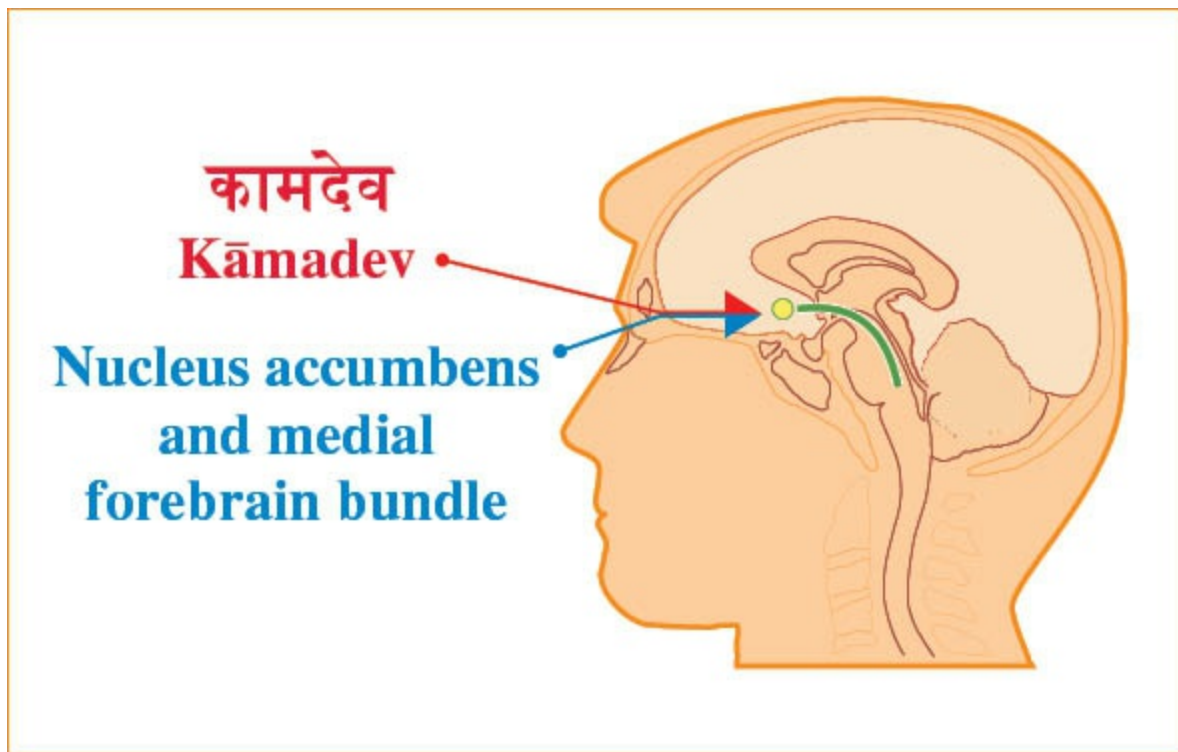
### ***Sarga 23: The Story of Kāmadev***

In *sarga 23*, Vishwāmitra related the story of Kāmadev, or Kandarṇḍ, to Rām and Lakshmaṇ. Vishwāmitra recounted how Shiva was once absorbed in the Transcendent when the need arose to destroy a *Rākshasa* named Tārak. Brahmā, along with other *Devatās*, incited Kāmadev to awaken Shiva. Kāmadev awoke Lord Shiva, but Shiva’s anger immolated him.

Kāmadev is found as the nucleus accumbens and the medial forebrain bundle of the brain. These areas are related to pleasure, enjoyment, addiction, and the ability to fulfil desires (the brain’s reward system), and are connected either



directly or indirectly to the substantia nigra, caudate nucleus, putamen, and globus pallidus.<sup>1</sup>



**Figure 8.2 Kāmadev corresponds to the nucleus accumbens and the medial forebrain bundle.**

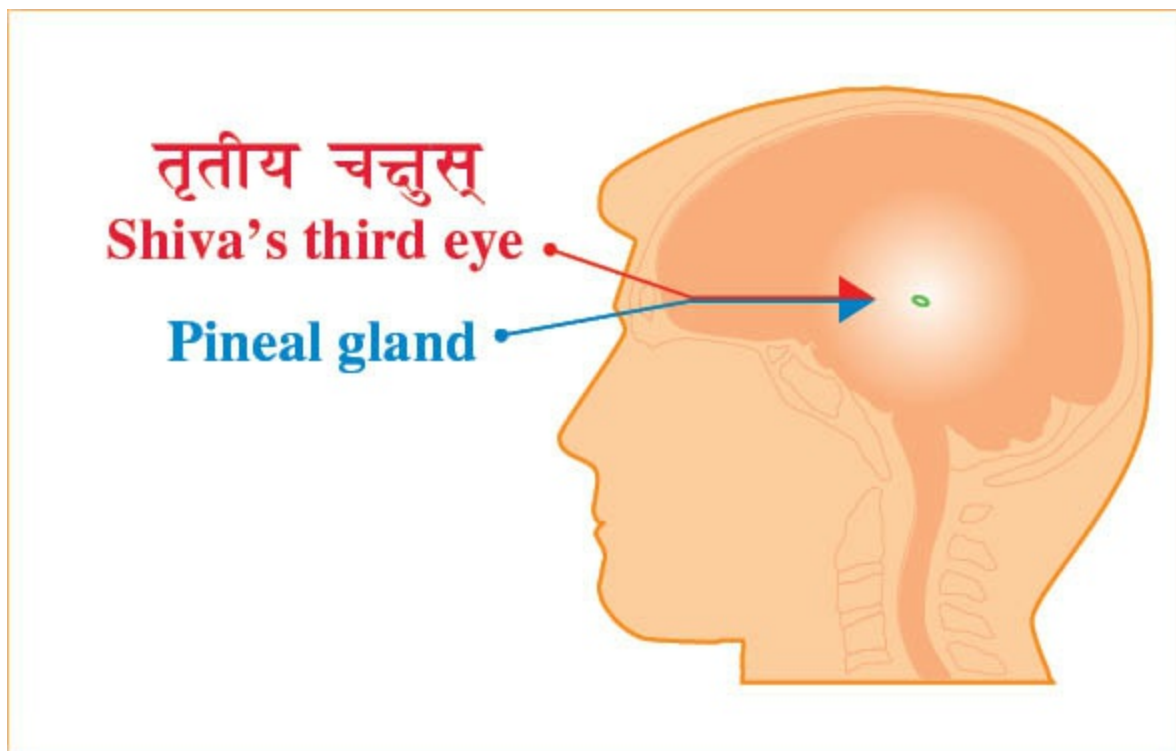
Kāmadev's ability to shoot arrows corresponds to the firing of neurons, which sends electrical activities to excite or activate different parts of the brain as well as other parts of the physiology. In this case, Kāmadev acted upon the synaptic gaps between neurons corresponding to Shiva, and to numerous structures in the centre of the brain. According to Tulsīdās' *Rām Charit Mānasa*, every aspect of creation felt pleasure when Kāmadev discharged his arrows. This is consistent with the physiological processes of the nucleus accumbens, which when activated leads to hyperarousal, hallucination, and the secretion of neurotransmitters such as dopamine.

When Shiva awoke, he opened his third eye and saw Kāmadev hiding among the mango trees. Shiva's gaze upon Kāmadev transformed him immediately

to ashes. Shiva's third eye corresponds to the pineal gland,<sup>2</sup> which when stimulated through light causes a specific response connected with the total inhibition of melatonin, as well as an inhibitory effect upon the reproductive system. Thus Shiva opening his third eye refers to the activation of light reception through the pineal gland, leading to the annihilation of the effects produced by Kāmadev in the brain.

Shiva is pure, transcendental Being, infinite silence. He is traditionally depicted surrounded by various items such as a drum, trident, and pot. These structures are present in the physiology, surrounding the central area of silence and total inner peace and harmony in the hollow area in the centre of the brain, where Shiva resides.<sup>3</sup>

The story of Kāmadev is one of the first recounted to Rām during his training with Vishwāmitra, and it is a reminder of the necessity of going back to Shiva, back to pure silence, in order for any action to reach its fulfilment. Shiva corresponds to the total harmony of the nervous system, which is necessary for destroying *Rākshasas*. Rām is the embodiment of Wholeness, *Brahm*, and is an incarnation of Vishṇu, infinite dynamism. When Vishwāmitra called upon Rām to help destroy imbalance in the form of a *Rākshasa*, he was reminded of a story that illustrates how the infinite silence underlying and supporting Natural Law must first be awakened in order to create balance.



**Figure 8.3 Shiva's third eye corresponds to the pineal gland.**

Shiva's awakening means that the power of silence will be available in the field of action. Kāmadev represents the quality that stimulates, or draws, Shiva outwards. Shiva rests in pure Being and must be awakened to the outer, dynamic, changing values of life. Shiva never changes, he is always the same, fully awake within himself, but his attention must be drawn out. This means that his power of inner silence will be able to permeate the dynamic and creative aspects of creation. How is it possible for dynamic qualities to have the value of Shiva, who is inner peace? Even the dynamic outer expression of life can be perfectly harmonious, with every action in tune with Natural Law, an expression of unmanifest silence. When there is perfect harmony in the expressions of Natural Law on the physical level, there can be no anxiety, fear, separation, or friction. This is the infinite peace of Shiva in the dynamic reality of life.

It is appropriate that Vishwāmitra, who represents balance, the vestibular system, recounted to Rām this story of how to enliven silence in order to re-

establish balance and order in life. When Shiva opened his third eye activating the pineal gland, he annihilated Kāmadev—his awakening automatically transformed Kāmadeva’s excitation into silence, peace, and harmony. Shiva did not do anything, he simply opened his third eye and Kāmadev vanished. Once Kāmadev stimulated the Absolute, there was no longer a need for him, and so he disappeared, going from a state of emergence to a state of submergence.<sup>4</sup> This is reminiscent of Maharishi’s description of the movement of dynamism into the silence of the gap, *Atyanta-Abhāva*, and its re-emergence from this silence.<sup>5</sup>

These *sarga* (19–23) mark the beginning of Rām’s training to fight *Rākshasas*. A *Rākshasa* generally corresponds to an abnormal structure or function, but can also correspond to a normal structure that is behaving abnormally and disrupting the body’s activity. There are many structures that can be brought to an abnormal state, either from being over activated (an excitatory state) or under activated (an inhibitory state). Either situation may cause such structures to behave abnormally. If they are perfectly balanced they are in tune with Natural Law, but if they are out of balance then they are not in tune with Natural Law and have acquired a *Rākshasic* nature, causing them to function abnormally. When Rām, Lakshmaṇ, or anyone destroys a *Rākshasa*, it signifies the elimination of an abnormality and the re-establishment of balance.

Some *Rākshasic* qualities may be necessary and their activities in tune with Natural Law, as both creative and destructive behaviours are necessary for the body’s proper functioning. As Maharishi explained in his commentary on the Bhagavad-Gītā, the process of evolution requires three main steps: creation, maintenance, and destruction. Sometimes the old must be removed so that the new can emerge—for a seed to become a tree, its reality must be destroyed in order for the tree to grow.<sup>6</sup>

Therefore we can consider two types of destruction: that which interferes with health and progress, such as a disease or imbalance, and that which is a

normal part of growth, such as structures that clean and remove toxic substances. Such structures and activities are perfectly in tune with the physiology and are not harmful.

In the same way, there are both good and bad *Rākshasas* in the Rāmāyaṇ. Rāvaṇ, the king of the *Rākshasas* and the ruler of Lankā, was disruptive and harmful. Vibhīshaṇ, on the other hand, was Rāvaṇ's brother and a good *Rākshasa*, a devotee of Rām who aided Rām in his conquest of Lankā. Ultimately Vibhīshaṇ was given the rulership of Lankā, and unlike his brother he ruled in a perfectly balanced and supportive manner, in harmony with Natural Law.

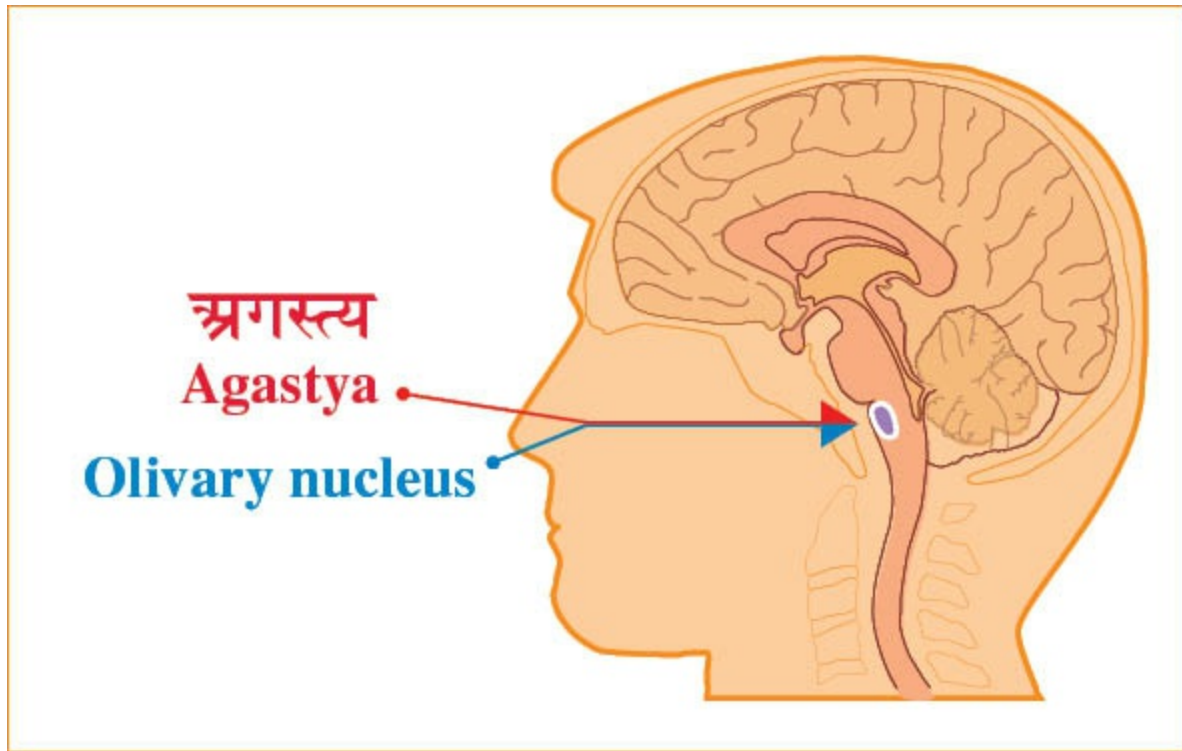
We will come across many *Rākshasas* throughout the Rāmāyaṇ, and will see how they can be located within the physiology. In some cases they may represent disease processes, such as a tumour, cancer, or a destructive inflammatory process, whereas in other cases they represent an overreaction of some part of the physiology. It is Vishwāmitra, the vestibular area, who introduces Rām to the concept of a *Rākshasa*, and teaches him how to destroy them and restore balance. We see this clearly in the next few *sarga*.

### ***Sarga 24–26: The Story of Tātakā***

In this section Vishwāmitra prepared Rām for his encounter with Tātakā—a powerful *Rākshasī* (female *Rākshasa*), who along with her sons was obstructing the *Yagya* performances and terrorizing the area where Vishwāmitra lived. Vishwāmitra explained that Tātakā had not always been a *Rākshasī*, but had been cursed into this terrible state as a result of her attack upon Ṛishi Agastya.

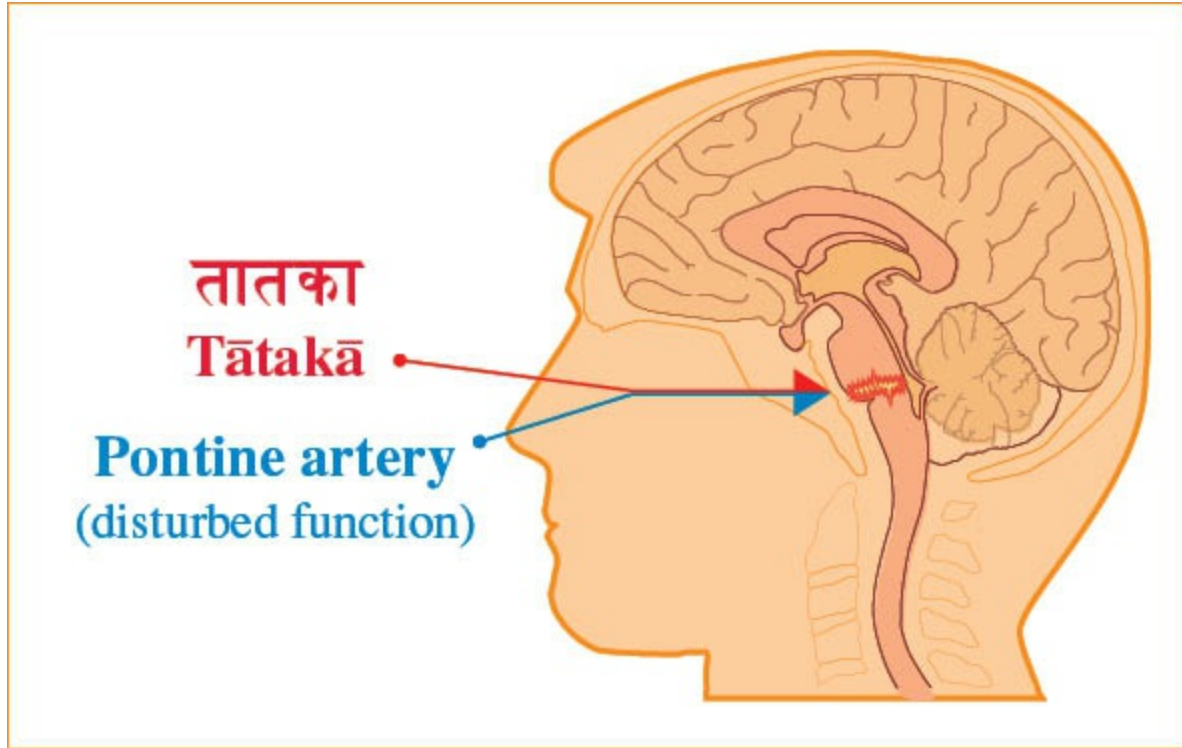
Tātakā corresponds to an aspect of the circulatory system that nourishes the physiology. However, as a *Rākshasī* she nourishes a destructive or anomalous process, such as excessive inflammation or cancer, or other type of abnormal growth.

Tātakā's place in the physiology is revealed by her relationship with Ṛishi Agastya. Agastya is found in the olivary nucleus of the brainstem,<sup>7</sup> and therefore Tātakā is an anomalous growth of the vessels supplying blood to that area. This corresponds to the pontine arterial blood vessels that emerge from the basilar artery.



**Figure 8.4 Ṛishi Agastya corresponds to the olivary nucleus.**





**Figure 8.5 Tātakā, a *Rākshasī*, corresponds to the disturbed functioning of a pontine artery (inflammation).**

The olivary nucleus is connected to many different parts of the nervous system, such as the descending tracts coming from all four lobes of the cerebral cortex, as well as those emerging from the red nucleus and the periaqueductal grey area. The main function of the olivary nucleus relates to the cerebellum. It is in fact the largest of the cerebellar relay centres. If there is an overflow of sensory or motor activity leading to an imbalance in motor function, the olivary nucleus along with the cerebellum participate in integrating these influences and balancing them, so that there is no excess motion or obstruction. The connection between the olivary nucleus and both the vestibular nuclei and the vestibulospinal tract are of particular interest here, since these are related to Rishi Vishwāmitra. Later we will consider Rishi Agastya in greater detail and examine the role he plays during the battle between Rām and Rāvaṇ. We will also examine the olivary nucleus's relationship to the cerebellum, where Rāvaṇ is located.

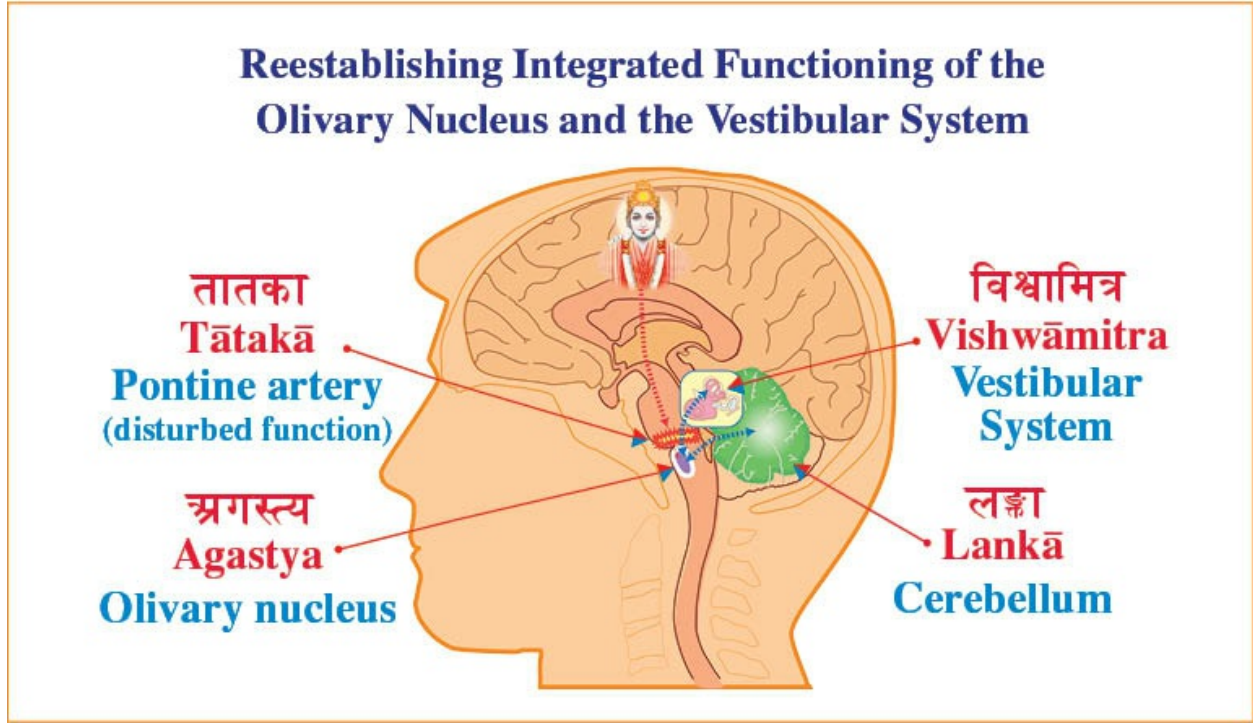
Previously we mentioned that Tātakā was cursed to become a *Rākshasī*. Physiologically, we understand this in the context of the process of differentiation, which is involved in the growth of new structures. The human body begins as a mixture of undifferentiated cells that have not yet committed to a certain type of activity or type of functioning. It is in the process of differentiation that cells commit to specific functions and become organized into tissues and organs. When an organ is fully differentiated, the cells commit themselves to performing the organ's required functions.

In the process of differentiation the growth of blood vessels is highly important for the support of the organs. Sometimes the body creates extra blood vessels and then destroys them. New blood vessels are also created, for example, to support a cancerous growth, and if there are insufficient blood vessels the growth will not be able to continue. Human physiology is so immensely complex and interconnected that some abnormalities can lead to the dysfunction of the entire body. This is the reason that individuals born with certain hereditary or congenital diseases may have abnormal structures with disturbed functions that cause problems throughout the body.

Tātakā was cursed as a result of disturbing Agastya and the area in which he lived. As a result, she and her sons also became an annoyance to Vishwāmitra. This means that she and her sons are an imbalanced or diseased process disturbing the olivary nucleus (Agastya), and because of a reaction from the olivary nucleus (in conjunction with the diseased process) the vestibular system (the abode of Vishwāmitra) was also being disturbed. The connection in this instance between Agastya and Vishwāmitra in terms of the disturbing elements points to one of the tracts connecting the olivary nucleus with the vestibular system. These tracts have been scientifically traced, and therefore we know exactly where Tātakā and her sons are located in the physiology and the type of disruptive activity they are likely to cause.

It is clear from this *sarga* how Tātakā, Agastya, and Vishwāmitra are related. Tātakā and her sons were disturbing the proper functioning of Vishwāmitra's

*Yagya*, which refers to the disruption of the sense of balance. This in turn has negative implications for the numerous structures to which the vestibular system is connected, particularly in terms of the proper functioning of the motor system (for which the involvement of the olivary nucleus is vital).



**Figure 8.6 Rām's battle with the Rākshasī Tātakā corresponds to the holistic functioning of the brain (Rām) balancing an inflammatory process in the pontine arteries (Tātakā), which was disturbing the olivary nucleus (Agastya) and the vestibular system (Vishwāmitra).**

Any overgrowth or irritation in the pontine arteries (often referred to as a vascular malformation) can disturb vital physiological functions, including balance and movement as well as the regulation of breathing, heart rate, and blood pressure. If they are anomalous, there is a constant leakage of material from these vessels, causing irritation and inflammation. Furthermore, these anomalous vessels nourish the growth of other abnormal structures. Tātakā's sons, who were also disrupting the *Yagya*, can be equated with the inflammatory and growth factors released by the bloodstream, such as

interleukins, prostaglandins, as well as with angiogenesis growth factors that can cause an increase in the growth of blood vessels.

The normal growth and development of the physiology is based on the genetic code available in the DNA. It is very important to note, however, that during development there is a continuous process of feedback and surveillance that takes place as cells find their way and differentiate to their mature normal structure and function. The cells' environment plays a crucial role in this process, which explains why and how totally undifferentiated cells that all look alike and have the same DNA commit to different functions, some becoming heart cells, others kidney cells, neurons, etc.

Two important factors in this regard are cell nourishment and a cell's ability to be aware of changes in its environment. Both are significantly supplied through blood vessels, which are constantly being created during development, and modelled, removed, or added as needed throughout life. For example, new blood vessels are created as required to nourish and allow the growth of a particular muscle when it is used more frequently. Even on a very short term basis, modern PET<sup>8</sup> scanning has shown that different small areas of the brain receive more blood flow when one is reading, anticipating action, speaking, etc. An area that receives attention receives a greater supply of nourishment, whereas one that is ignored tends to atrophy.

During different phases of growth there are various potentialities available for each cell and organ, and the process of production or destruction of blood vessels closely monitors and accompanies these potentialities. The story of Tātakā and her creation, curse, mutation, inflammation, displacement, fight, and destruction can therefore also be seen as part of the normal healthy process of physiological growth and development.

As development progresses from childhood to adulthood, it is important for the holistic value of the physiology to prevent abnormal structures from developing. One of the first lessons Rām learned from Vishwāmitra was that it was his duty to check the growth of any abnormality, which corresponds to

the physiology's need to silence or subdue an artery that is in the wrong place. Furthermore, if abnormal cells are allowed to grow they must be checked and stopped. This is a vital aspect of physiological development.

Inflammation should be a normal part of the healing process, as it helps bring blood to an area to cleanse it of foreign organisms. If, for example, we cut our finger and bacteria enter the body, the immune system will recognize and attack the foreign invader, localising its effects through the inflammatory response. This response consists of an increase in blood flow to the injured area, allowing more of the immune system's defence mechanisms to arrive. In some cases, however, the inflammatory response may become unrestrained and develop into part of the disease process. For example, if a joint is constantly irritated by inflammatory factors, new and anomalous blood vessels may form and begin nourishing abnormal structures such as excessive connective tissue growth, cartilage, and bone. This eventually leads to the complete disruption of the normal functioning of the joint.

The kinds of abnormal physiological activities associated with Tātakā and her sons correspond to an inflammatory disease process that is disrupting specific areas of the central nervous system. Tātakā began by irritating the area of Agastya but was repulsed, and so commenced disturbing a connected area, the vestibular nuclei tract and system within the labyrinth of the ear where Vishwāmitra is located. The vestibular system includes the canals mentioned earlier that contain fluid. The moving and shaking of the rivers (mentioned in the Rāmāyaṇ) corresponds to the shaking and moving of fluids in the canals. These canals and the surrounding area are highly prone to inflammation, which may be the result of exposure to viruses or bacteria. In such cases, the ear can become infected and inflamed, causing different types of vertigo and dizziness.

This type of disturbance in the vestibular system and inner ear canals corresponds to the turmoil created by Tātakā in the forest in which Vishwāmitra dwelt. Tātakā, by disturbing these areas and the tracts and



nuclei to which they are connected, disrupted the necessary balance and coordinated activities essential to the proper performance of *Yagya*. The appearance of Rām is the emergence of the physiology's holistic organizing ability.

While Rām corresponds to a specific place in the brain, we must remember that ultimately he is the holistic functioning of the whole brain. Rām is *Brahm*, Rām is Wholeness, and his presence integrates every aspect of the physiology. If Rām's attention is drawn to a disturbance or anomalous process, he provides his integrating, life-supporting influence in order to reinforce and strengthen that area. Here Rām induces the physiology of the area to heal itself by initiating the proper inhibitory processes that can reverse the presence of anomalous vessels or structures. This is how Rām's presence with Vishwāmitra ensured the destruction of Tātakā.

It is known that anomalous vessels or growths can be removed through the action of specific cells, such as macrophages. The macrophages literally engulf and digest abnormal materials. These cells are part of the overall immune surveillance system, constantly on the alert for the presence and removal of harmful foreign materials or abnormal growths. This system is one of the physiological mechanisms by which Rām, who controls the holistic and intelligent functioning of the body, destroys or removes an abnormal structure.

It is interesting to note that Rām expressed his reticence to destroy a female, even though she was a *Rākshasī*. Vishwāmitra, however, insisted that Tātakā be slain because of her destructive power. Veins and arteries are extremely important for nourishing the physiology, and are only destroyed in instances of anomalous growth. In this case it is clear that the disturbed functioning of the pontine artery that Tātakā represents was nourishing an anomalous growth in a critical part of the body. When Rām first attacked her, he tried to only wound her by cutting off her extremities—the branches of the pontine artery. The nervous system was attempting to save the main artery and clear



away its branches, but the anomaly was too destructive, and therefore Vishwāmitra instructed Rām to kill her.

During the heated encounter, Rām showered Tātakā with arrows, while she in turn hurled rocks and other materials at him. As a vessel is being destroyed, it becomes punctured and explodes, expelling various cells and other materials. The description of Tātakā in her most extreme form could suggest the bursting of a swollen aneurysm in the brain, which causes a rush of cells and physiological material into the surrounding area.

Another interesting element of this story is its reference to sound: Rām began his attack by ‘twanging’ (ज्यायघोषम् *gyāyaghosham*) his bow, thus creating a very loud sound that caused Tātakā to become agitated. As we have seen, the area of Vishwāmitra’s forest is located in the vestibular system, which includes all the structures of the inner ear where sound reverberates within specific canals.<sup>9</sup> The establishment of balance and coherence in these areas takes place through Rām’s ability to evoke Wholeness, which in physiological terms refers to the power of the attention of the higher levels of the brain that enliven the body’s underlying intelligence to re-establish balance.

When Rām generated sounds with his bow during his battle with Tātakā, he was creating a vibration in opposition to the *Rākshasic* vibration, causing her to become agitated. Rām knew instinctively that the sound would be disturbing to her, rather than beautiful and harmonious. This is how the sounds of Vedic Recitation affect a disease process—the disease process will feel agitated and disturbed, and will disappear. The Vedic Sounds that Maharishi has given to the world reset and restore balance to the physiology and eliminate disease and problems. These sounds are used in different ways, such as in *Yagya* and Vedic Sound therapy.

It is interesting to note that Vishwāmitra, who possessed enormous power, did not attempt to destroy Tātakā himself. The ability to create order and

perfection in the entire kingdom must take place through Wholeness, through Rām. Vishwāmitra could have destroyed the *Rākshasī*, but it was Rām’s duty, Rām’s *Dharma*, and in this sense Vishwāmitra was calling upon Wholeness to take over the responsibility for balance. Vishwāmitra was a great *Ṛishi*, a performer of *Yagya*, and was therefore not going to fight on the level of physical action. Instead he called upon Rām, *Brahm*, to re-establish order.

Rām was born to bring everything under the control of *Brahm*, to bring everything into perfect harmony with the totality of Natural Law. By removing negativity and suffering at the end of the Rāmāyaṇ he created Rām Rāj—the rule of Rām, Heaven on Earth.

### ***Footnotes***

1. As described in *Human Physiology: Expression of Veda and the Vedic Literature* (pp. 116–129), the substantia nigra, caudate nucleus, putamen, and globus pallidus are part of a group of structures in the centre of the brain called the basal ganglia. These correspond to the *Grahas*, or planets. The substantia nigra corresponds to Shukra, the Sanskrit name for Venus, and the head and tail of the caudate nucleus correspond to Rāhu and Ketu respectively. The putamen corresponds to Shani, or Saturn, and the globus pallidus to Guru, or Jupiter.

2. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 337.

3. Ibid., pp. 334–341.

4. A traditional name of Kāmadev is Ananga, literally ‘one without limbs’, or ‘bodiless’.

5. See Chapter I, [Total Knowledge of Natural Law Is Contained Not Only in the Sounds of Veda, but Also in the Silent Gaps Between the Sounds](#).

6. See commentary to verse 1, Chapter 1 in *Maharishi Mahesh Yogi on the Bhagavad-Gita, A New Translation and Commentary, Chapters 1–6*, London: Arkana, 1990.

7. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 382–383.

8. PET stands for Positron Emission Tomography, which measures important body functions such as

blood flow, oxygen use, and sugar metabolism.

9. We will see later that the bow corresponds to the spinal cord. Summoning the physiological activities needed to use a bow in order to shoot an arrow or even just twanging it correspond to using one's full attention—drawing the attention from anything peripheral to a central focus.



# Chapter IX

## *Bāl Kāṇḍ, Sarga 27-51*

### *Sarga 27-28: Rām's Training*

**T**hese two *sarga* contain passages that describe Rām and Lakshmaṇ learning various skills that refined their vision, balance, and hearing, as well as their head movements. This depicts the establishment of many precise connections between the different areas of the brain in which Rām and his brothers are located, as well as between the vestibular system and other parts of the physiology.

Rām's initial training was with Vishwāmitra, the vestibular system, which is related to balance, precision, strength, and energy. It is through the vestibular system that the physiology is able to achieve enormous precision of action. For example, learning a skill such as archery involves looking at a target, estimating distance and angles, adjusting the arm and bow, controlling the breath, using appropriate strength, and creating the exact degree of muscular tension, all with great precision. This entails the enlivenment of the vestibular system, which controls functions such as vision, body position, and the assessment of motion.

It is highly significant that Rām's first apprenticeship, in which he learned these fundamental abilities, was with Vishwāmitra. And it is interesting to note that Vishwāmitra trained Rām in weaponry, which included the use of powerful missiles presided over by the *Devatās*, called *Astras*. Rām's training began after his first battle with a *Rākshasa*, which was a kind of initiation. His success in this first encounter indicates that the areas of the brain that he represents are able to take more responsibility and assume greater control over different aspects of physiological functioning. Rām also learned to always refer back to his own inner experience, his inner Self, which is associated with the areas corresponding to the wise *Ṛishis*.

The alternation between outer and inner activity is essential for a balanced and successful life. Maharishi has emphasized the importance of both meditation and activity—that we should practise Transcendental Meditation twice a day and then become engaged in activity. This alternation between silence and activity is the basis for the unfoldment of higher states of consciousness. It is also important that we do not strain in activity or create disharmony for ourselves with the natural rhythms and flow of life. Until Rām has completely taken over the physiology, we may react to the requirements and needs of the body in a way that is not completely in tune with Natural Law.

In Vishwāmitra's interaction with Rām, it is as if he said, 'Yes, Rām is responding to me, now I can give him more secrets of power. I can give him the secrets of the *Astras* and how to use them, because I know he is in tune with his inner Self. He is in tune with the *Rishis* and the Vedic Tradition and he is in tune with the knowledge of reality'. Vishwāmitra would understand that the brain was not yet fully developed, for Rām had not taken over the complete physiology, but he was also aware that Rām was mature enough to listen carefully and follow his instructions, which refers to the higher brain's ability to be attentive to the body's inner needs and requirements. And Rām had already gained the essential skill of balance—mentally, physically, and emotionally. Before becoming engaged in any kind of activity one must be able to be quiet, with a clear, calm, mind, restfully alert and ready to perform ideal action.

Rām took his instructions from Vishwāmitra to heart. He obeyed the great *Rishi* and paid attention to the time-tested Vedic Tradition. Even Rām, the incarnation of Vishṇu, listened to the *Rishis*. This is why the *Rishi*, the *Guru*, is described in the Vedic Tradition in terms of the highest values of Natural Law: *Gurur Brahmā, Gurur Viṣṇur, Guru Devo Maheshwara—the Guru is Brahmā, the Guru is Viṣṇu, the Guru is the great Lord Shiva*. The *Guru* is capable of bringing Heaven to Earth. Even the administrators of the universe bow down to the power of the *Guru*. Rām was obedient to Vishwāmitra even

to the point of doing something that was almost unthinkable—killing a female. This is contrary to the codes of behaviour for a *Kshatriya*, yet when directed by Vishwāmitra he obeyed.

Once Rām had killed the *Rākshasī*, he was instructed in the use of more powerful weapons, because his encounter enlivened in him the ability to eliminate negativity. A similar process takes place in the development of the immune system. The immune system is the body’s natural defence mechanism, and it must learn to distinguish between ‘self’ and ‘non-self’—that which is part of the physiology and that which is foreign.

When immune cells are formed early in life, they constantly circulate and are exposed to different aspects of the body, undergoing a process through which they learn to recognize the normal and healthy cells as ‘self’. When a foreign invader, such as a bacterium or virus, first enters the body, it comes into contact with certain immune cells programmed to recognize it as ‘non-self’. Initially the immune cells are not capable of launching a strong attack against an invader, but once the recognition process begins, the immune system builds up reserve cells that can quickly recognize bacteria or viruses.

The next time one is exposed to the same foreign material, the body can immediately attack and destroy it. The foreign material acts as a stimulant so that the body recognizes the invader as ‘non-self’. As a result, the immune system learns to immediately recognize and destroy any harmful substance that we may come into contact with.

In addition to the artificial process of vaccination, whereby the immune system is stimulated by means of a vaccine, this immunization process also takes place naturally, to some extent. For example, when a child grows, his immune system is exposed to many kinds of substances, and as a result develops a naturally acquired immunity.

In this light we can see how Rām’s battle with Tātakā and her sons is his initiation into what is ‘self’ and what is ‘non-self’—a kind of natural



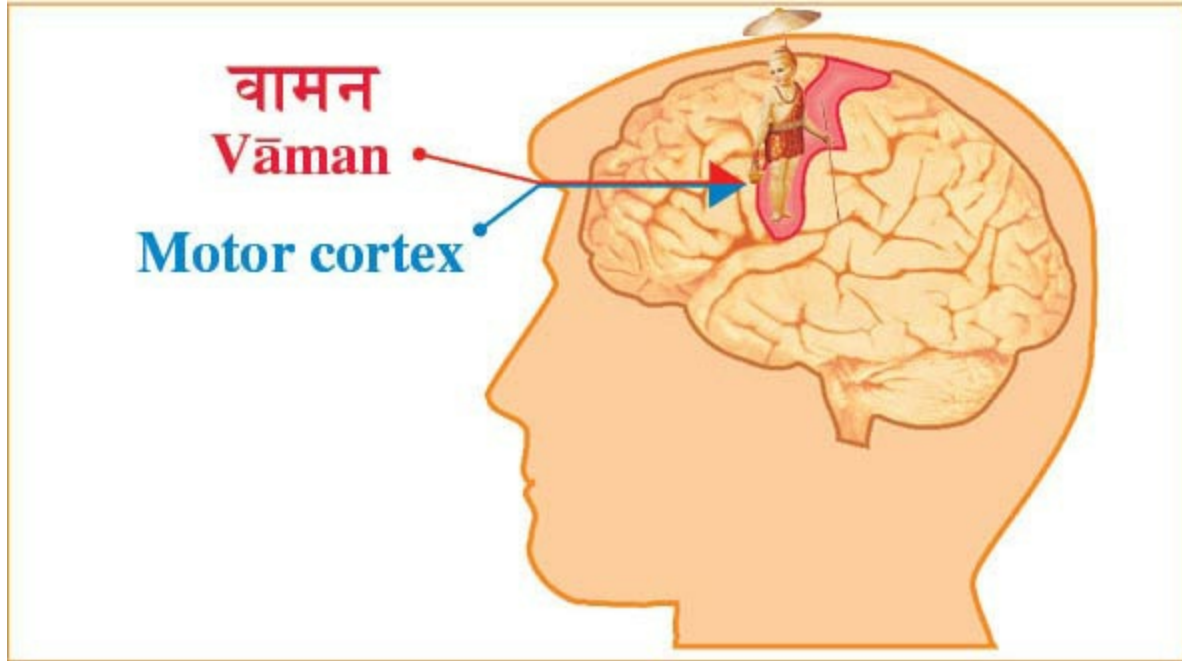
vaccination process to enliven in wholeness the ability to remove ‘non-self’, and to ensure that anything interfering with the physiology’s wholeness is immediately eliminated. This is Vishwāmitra’s educational programme, which brings Rām to his full value of enlightenment in all fields of life, perfecting the physiology so that it spontaneously acts in tune with Natural Law.

This is an overview of how the physiology properly matures and develops. The importance of maturation is clearly seen in the immune system as well as in the development of the nervous system, the great controller of the physiology.

### ***Sarga 29: The Story of Vāman***

In *sarga* 29, Rām and Lakshmaṇ arrived at the *Siddha Āshram* deep in the forest, and asked Vishwāmitra about its history. Vishwāmitra explained that it had once belonged to Lord Viṣṇu when he was incarnated as Vāman, the dwarf. Vishwāmitra narrated the story of Viṣṇu’s incarnation as Vāman and how Vāman, a dwarfish ascetic boy, eradicated evil on Earth.

As an incarnation of Viṣṇu, Vāman is Rām, but in a different form. He is present in the motor cortex of the brain, which is responsible for all action. The motor cortex contains a map of the body with each area represented in proportion to its importance for motor activity. This map is known as the homunculus, which in Latin means ‘dwarf’.



**Figure 9.1 Vāman, Vishṇu's fifth incarnation, corresponds to the motor cortex.**

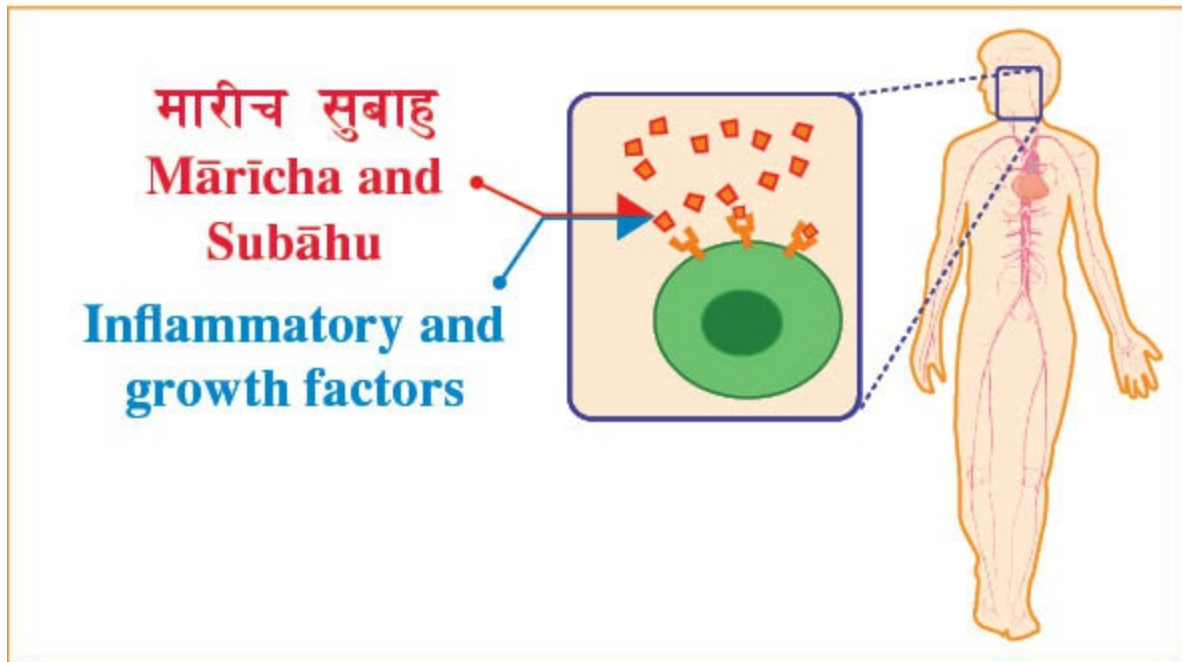
In the story,<sup>1</sup> Vāman requested three feet of ground such as he could pace out from the *Rākshasa* ruler Mahābali. Enlarging his body to gigantic proportions, Vāman then measured Heaven, Earth, and the lower region in only two steps. When he asked for a place for his third step, Mahābali bowed down and offered his own head. Three of Vāman's steps covered the entire universe, and in this way he easily brought it back under the control of Wholeness. In the physiology we can see that all of the body's voluntary actions take place in three steps: from the cortex (Heaven) to the upper motor neurons (Earth), from the upper motor neurons to the lower motor neurons (the lower realms), and from the lower motor neurons to the muscles (Mahābali).

Vāman's story offers a precise description of the three stages of voluntary actions. From a more profound perspective, the three steps represent the unmanifest value of Natural Law expressing itself into Ṛishi, Devatā, and Chhandas.<sup>2</sup> Vishwāmitra told stories to awaken the holistic value of the brain, so that in a gradual and systematic way Rām would govern the entire

physiology.

### ***Sarga 30: The Battle with Mārīcha and Subāhu***

In *sarga* 30, Rām and Lakshmaṇ safeguarded Ṛishi Vishwāmitra's *Yagya* for six days and nights. On the last night a group of *Rākshasas* led by two sons of Tātakā, Mārīcha and Subāhu, attempted to disrupt the *Yagya*. Acting deftly, Rām struck Mārīcha, sending him off to a great distance, and killed Subāhu along with the others. Rām thus made it possible for Ṛishi Vishwāmitra's *Yagya* to succeed.



**Figure 9.2 The *Rākshasas* Mārīcha and Subāhu correspond to inflammatory and growth factors.**

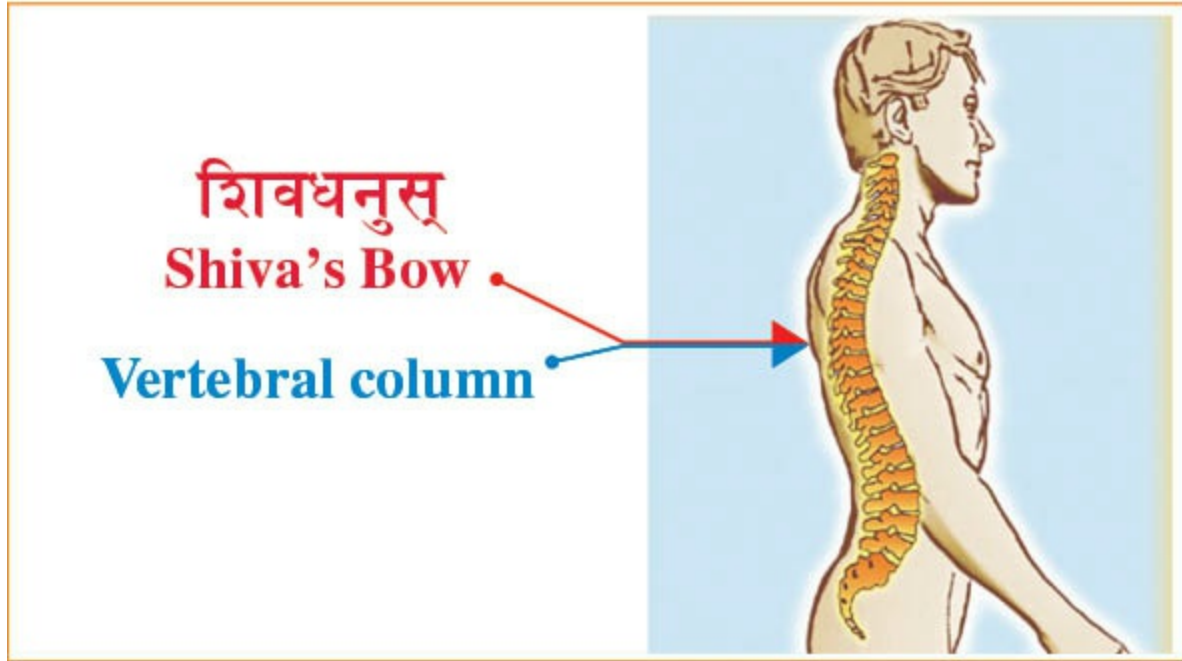
We saw earlier that Tātakā corresponds to a special abnormal growth of the arteries (see [figure 8.5](#)), while her sons, Mārīcha and Subāhu, represent inflammatory components that disrupt the area corresponding to the *Yagya* performance. The sons disturbed Vishwāmitra's *Yagya* by throwing blood upon the fire, which means that they caused an increase in blood flow in the

areas where Vishwāmitra is located. In this story Rām cast Mārīcha away but did not kill him. Similarly, the nervous system might not eradicate inflammatory and growth factors, but may instead put them in their proper place. Thus Rām sent Mārīcha into the ocean, which corresponds to sending the inflammatory factors to the lymphatic fluid. The lymphatic system acts like an ocean in its ability to absorb these factors. The story describes a cleansing or purifying process within the body in which inflammatory factors are controlled and inhibited to prevent them from causing additional disturbance. Mārīcha appears again later in the Rāmāyaṇ, when Rāvaṇ coerced him to help with Sītā’s abduction.

### ***Sarga 31: Rām Travels to Attend King Janaka’s Yagya***

In *sarga* 31, Ṛishi Vishwāmitra travelled to the kingdom of Mithila with a group of *Ṛishis* to attend King Janaka’s *Yagya*, and to see the auspicious bow of Lord Shiva, worshipped for ages in Janaka’s palace. The *Ṛishis* suggested that Rām accompany them to see this marvellous bow, and so they proceeded from *Siddha Āshram* towards the river Sone, a tributary of Gangā, and camped on its bank for a night.

Shiva’s bow corresponds to the vertebral column, which is the body’s backbone, supporting the head and protecting the spinal cord. The vertebral column forms the shape of a bow and is both rigid and quite strong. It is the brain that activates the spinal cord to move the body, and it is Rām, the holistic value of Natural Law, who can ultimately activate or break the bow. The breaking of the bow, as we shall see in the next chapter, is highly significant. In bringing Rām to see the bow, Vishwāmitra evoked the value of Shiva in Rām’s awareness.



**Figure 9.3 Shiva's Bow corresponds to the vertebral column.**

### ***Sarga 32: The Story of Kusha***

In *sarga* 32 Ṛishi Vishwāmitra narrated the story of Kusha, a son of Brahmā. Kusha begot four sons, among them Kushanābha, who in turn fathered one hundred beautiful daughters. Vāyu, the *Devatā* presiding over the wind, cherished them all and wanted them in marriage. The daughters refused, however, preferring a marriage arranged by their father. In his wrath, Vāyu disfigured them.

Vāyu corresponds to Vāta, one of three basic governing agencies of the physiology as described in Āyur-Veda. Vāyu's wrath refers to a change in the appearance and function of the blood vessels, where the daughters are located. The blood vessels carrying high oxygen levels are called arteries and the blood vessels carrying high carbon dioxide levels are called veins. Arteries have strong walls and look bright and reddish because of the oxygenated blood. After oxygen is released and carbon dioxide is picked up, however, the blood vessels become bluish and appear less bright—they are more 'fickle' veins with thin walls carrying the deoxygenated blood and

waste products of cellular metabolism.

As we saw earlier, arteries correspond to queens and veins to servants. The transformation of blood vessels from arteries into veins at the level of the capillaries can be seen also as the disfiguration of Kushanābha's daughters resulting from the wrath of Vāyu. In addition, a configurational change takes place in the structure of the hemoglobin molecules as a result of the release of oxygen, which is another aspect of what is described as disfiguration.

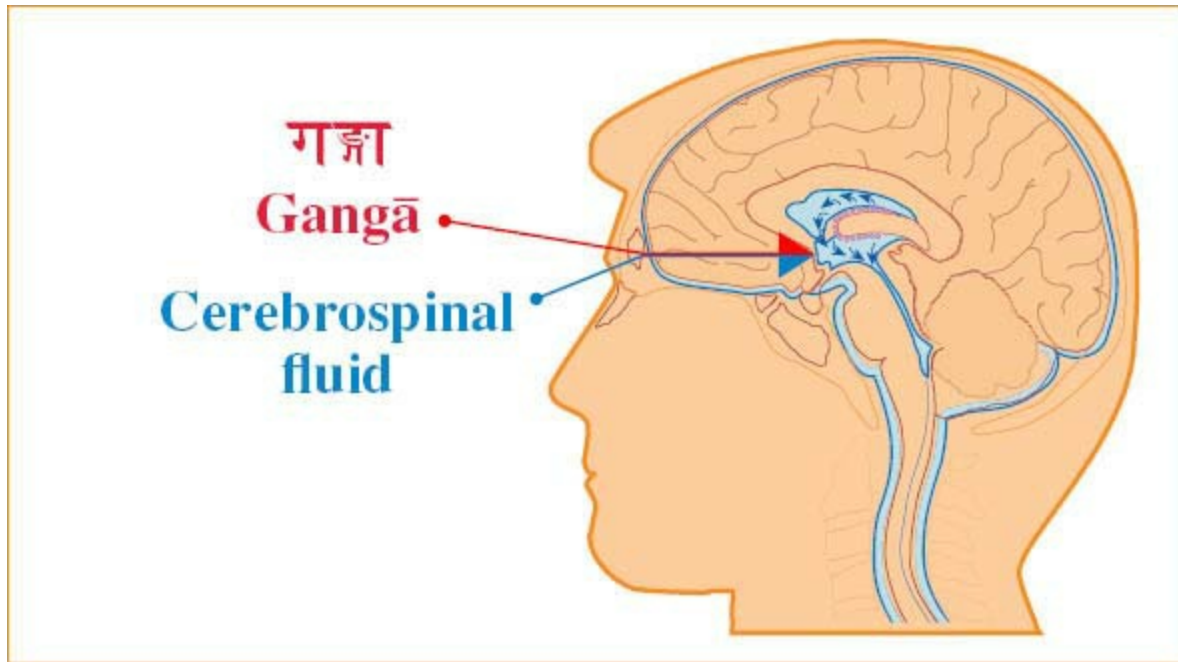
Vāyu also corresponds to oxygen carried in the air, which is absorbed into the blood in the lungs and then released by the blood to nourish tissues. The arteries supply oxygenated blood and nourishment to the tissues, and once oxygen is released into the tissues the de-oxygenated blood returns to the lungs to become re-oxygenated. In this context, we see how the arteries are, so to speak, faithful to their father, and accomplish their allotted duty of delivering oxygen and nutrients to the tissues. If married irrevocably to Vāyu, they would not be able to perform their duty, because if they were to remain attached to oxygen they would not be able to release it to the tissues. Their role, therefore, is to encounter Vāyu (oxygen) and become attached, but their duty is to let go of the oxygen by releasing it to the tissues (i.e. rejecting Vāyu and being faithful to their father), thereby nourishing the whole body.

### ***Sarga 33–36: The Birth of the River Gangā***

In *sarga* 33–36, Vishwāmitra related the story of the birth of Gangā, explaining that she flowed in three places: originating in Heaven she descended to Earth, and from there continued to the netherworlds. Gangā corresponds to the cerebrospinal fluid, a clear, supportive fluid found inside and around the brain. The flow of cerebrospinal fluid emanates from the choroid plexus in the ventricles, just as Gangā and its branches flow from Shiva's head. Gangā's flow and her waters also correspond to all circulating fluids in the central nervous system, such as the endolymph in the semicircular canals, with particular relevance to the vestibular area—Vishwāmitra's location. The vestibular area analyses movement, balance, and



the position of the head. Vishwāmitra referred to Gangā as his sister, and indeed they sit together in the physiology, working together and helping each other. The endolymph in the semicircular canals enables the vestibular system to assess the position of the head and eyes, as well as the speed and direction of the body's motion in space.

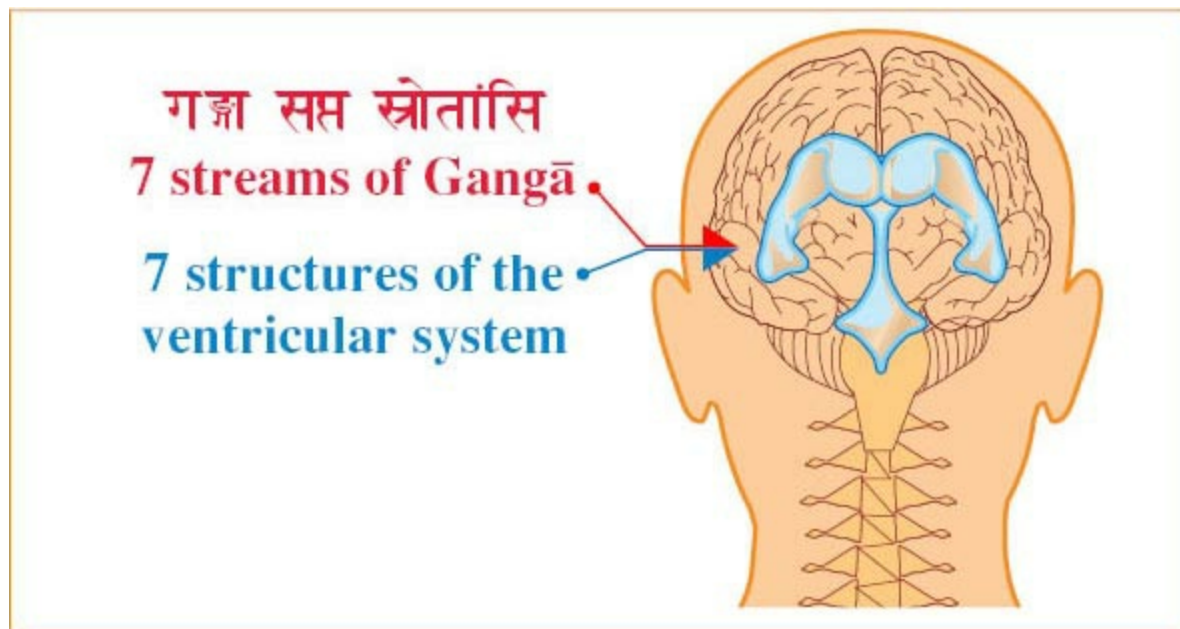


**Figure 9.4 The river Gangā corresponds to the cerebrospinal fluid.**

We have seen that Shiva is the hollow, silent ventricles in the centre of the brain. Gangā is called *Tripathaga*—flowing in three directions—which has two meanings. First, when Gangā fell to Earth from the heavens she landed on Shiva's head and split into seven rivers. Three of the rivers—Suchakshus, Sītā, and Sindhu—flowed toward the West, while the Hlādinī, Pāvanī, and Nalinī flowed toward the East. Gangā herself flowed on her own course following King Bhagirath's chariot, in order to purify the whole world. These three currents of celestial water are the three paths of Gangā on Earth. The second meaning of *Tripathaga* is that Gangā flows in Heaven, on Earth, and in the subterranean region.

The cerebrospinal fluid flows in three directions from the choroid plexus,

corresponding to the three directions of Gangā's flow. The first direction is to the right ventricle, the second to the left ventricle, and the third is downward through the cerebral aqueduct to the fourth ventricle. Gangā's seven streams correspond to the ventricular system of the brain, which is a hollow structure with two heads (two anterior horns) and four other horns (two inferior and two posterior). The final stream is the flow that moves in the direction of the brainstem and spinal cord, where a special space called the fourth ventricle is located.



**Figure 9.5 The 7 streams of Gangā correspond to the 7 structures of the ventricular system.**

With respect to Gangā's flow in the three regions, the cerebrospinal fluid covers the whole brain, corresponding to Heaven. It goes around the spinal cord, corresponding to Earth, and also moves deep within these structures, corresponding to the subterranean regions. Again we see a very interesting correlation with the structures and functions of Gangā, who is given a female role in purifying, protecting, nourishing, and cleansing the entire Earth. This corresponds precisely to the cerebrospinal fluid moving everywhere in the central nervous system, creating a soothing, purifying, and supporting effect,

even to the peripheral nervous system. In its most expanded meaning Gangā represents all fluids in the body even outside the nervous system, as well as all water, all rivers, all oceans on planet Earth, and in the universe.

Vishwāmitra and his sister Gangā on the most subtle levels also correspond to *Purusha* and *Prakṛiti*, silence and dynamism—the silent witness and the dynamic performance of the *Yagya*.

These are a few perspectives for viewing reality—from the unbounded, infinite, silent perspective, to the level of its emergence in sound, and to the more expressed level of the dynamic physiological structures and functions within the physiology. Again, these stories serve as a means for Vishwāmitra to enliven in Rām a deeper understanding of important physiological structures and functions. This is part of Rām’s preparation to rule over these structures and functions—for *Brahm* to bring them into one unified value.

In *sarga* 36 and 37 Vishwāmitra’s discussions evoked the value of Shiva, and in *sarga* 37 we hear the story of Shiva’s son Kārttikeya, who emerged from Gangā and later became the Commander in Chief of the *Devatā* army.

Kārttikeya, who has six heads, is located near the brainstem. He is often described standing near a peacock, and if we examine peacock feathers we find that the top of the feather is a rounded structure like an eye, followed by slim fibre-like structures. When the peacock opens its feathers, a row of these small rounded structures like eyes can be seen at the top, with the fibres underneath. In the location of Kārttikeya in our physiology, a group of fibres ascends to the grey matter of the cortex, like the top portion of peacock feathers.

In Kārttikeya we find a holistic and integrative style of rulership. As Commander in Chief of the *Devatā* army, he administers from the level of infinite organizing intelligence, and leads all the *Devatās*, who create order in the kingdom of the human physiology. The six heads of Kārttikeya are the five basal ganglia (the caudate nucleus, the putamen, the globus pallidus, the subthalamic nucleus, and the substantia nigra) and the thalamus. The basal

ganglia receive input from and project to the cortex by way of the thalamus. It is these projections that form the feathers of the peacock. These six physiological structures forming the head of Kārttikeya control movement and cognitive function. They truly are like the administrators and managers of balanced perception and cognition (mainly the thalamus) as well as speech and action.

Once again it is Vishwāmitra who exposed Rām to these values of leadership, so that he would integrate them in his consciousness and act in his role as the total brain, awakening all values of Natural Law to create perfection in mind, body, and behaviour.

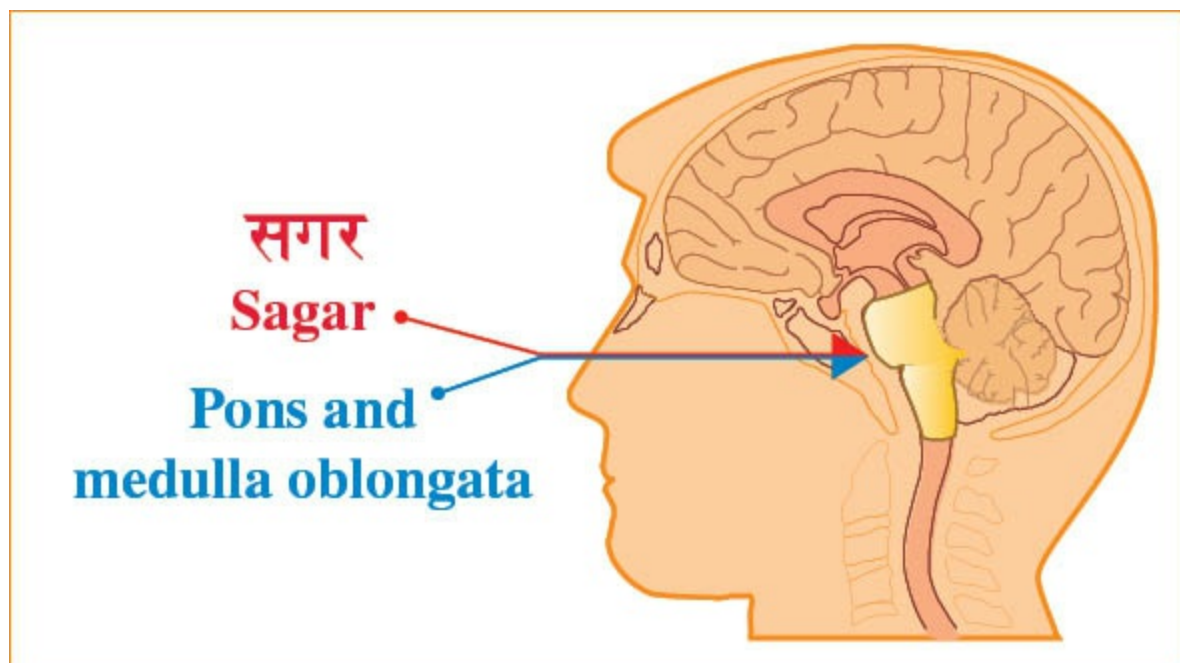
### ***Sarga 38–40: The Story of King Sagar***

In *sarga* 38 Vishwāmitra narrated the story of King Sagar, Rām's forefather and one of the earliest kings of Ayodhyā. Vishwāmitra explained that Sagar was initially childless, but subsequently fathered 60,000 sons of merit and one son of demerit. One day King Sagar began the performance of an *Ashwamedha Yagya*, which involves the release of a ritual horse. Indra took the horse away in order to hinder the performance, and thus the *Yagya* could not be completed. Sagar then ordered his 60,000 sons to search for the horse, with instructions to dig even under the Earth if they were not able to find it on the surface. The princes acted accordingly, to the grief of the beings living in the nether worlds, who prayed to Brahmā to prevent the destruction of their worlds.

*Sarga* 40 reveals how the sons dug up all the quarters of the Earth, and when they finally entered the northeastern corner they found the horse and also Kapila, who was Vishṇu in the guise of a *Ṛishi*. The sons attacked Kapila, but were burned into heaps of ashes by his yogic powers.

King Sagar was Rām's forefather and therefore an elder of King Dasharath. We have seen that when we look at the relationship between father and grandfather, we must examine the structure of the older parts of the

physiology in which the son is located. If we consider all these areas we find the genealogy of the kings in the sense that they are sitting behind each other. Therefore, as a forefather of both Rām and Dasharath, Sagar must be in a lower segment of the brainstem area, namely the pons and medulla, which manage such basic functions of the body as the regulation of the heart and breathing. All the fibres of the sensory input systems must pass through these areas in order to reach the higher brain centres.



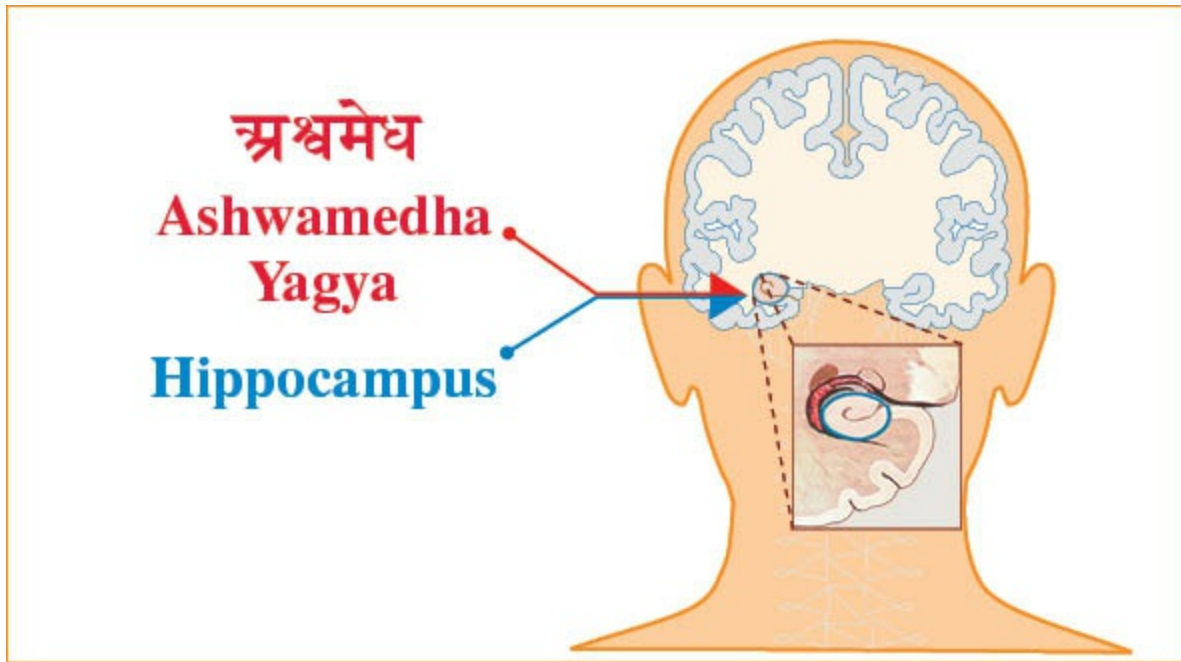
**Figure 9.6 King Sagar corresponds to the pons and medulla oblongata.**

In the course of an *Ashwamedha Yagya*, a horse is released to wander freely (*Ashwa* means ‘horse’). This horse corresponds to the hippocampus, which received its name because of its resemblance to a horse’s head, particularly a sea horse (*hippo* in Greek means ‘horse’). This structure integrates memory, taking into consideration past, present, and future events. If the hippocampus were to be destroyed, one would lose memory, particularly short-term memory. Without short-term memory one would forget familiar faces, the location of one’s home, etc., and there would be no recollection of events that



transpired even minutes before.

Previously we saw the significance of the *Ashwamedha Yagya* when King Dasharath brought Rishi Rishyashringa to perform it in Ayodhyā. In that case, the *Yagya* resulted in the birth of Dasharath's sons, but here King Sagar aspired to gain rulership over Nature. In both situations, however, a large transformation took place following the *Yagya*. In the case of Dasharath's *Yagya*, Rām was born, resulting in a transformation of events and a whole new reality. In the case of King Sagar, Gangā eventually descended to Earth.



**Figure 9.7 The *Ashwamedha Yagya* corresponds to transformations within the hippocampus.**

How does the horse—or in modern scientific terms the hippocampus—relate to these major transformations? One perspective is that the present reality is transformed. Our present reality is defined by what we know best in our lives, such as our identification with family, home, job, and even our country. It is as if we are saying, ‘I am a doctor who is married and has two children’, or ‘I come from France and these are my ancestors’. This type of identification is processed in the hippocampus.



The hippocampus stores memories that generally trap an individual in a specific perception about himself—his experience in life and also his perception of what he can and cannot do. People create their image of the world and their own boundaries. Most of the time these perceptions, or memories, trap an individual and prevent him from appreciating the field of all possibilities, which is available and the birth right of every individual.

It is necessary to clean up the hippocampus and all associated structures from their heavy load of memories (which could also be referred to as stress), so that one can unfold the field of all possibilities and fulfil any desire. This is the profound significance of the *Ashwamedha Yagya*, or Horse Sacrifice: the hippocampus (the horse-like structure) is put through a process of purification that takes it to the least excited state, which has no negativity, no harmful memory—only the memory of the Self in Pure consciousness, the field of all possibilities. Any new state can emerge in this field, any possibility is available.

We can relate this concept of transformation to the mechanics of the gap, which we discussed in Chapter I. Maharishi explains that in the gap there is a memory of what occurred previously, and also a memory of what is going to take place. In any process of transformation there is the removal of the old and the emergence of the new. This is the process of evolution, in which every individual is changing every minute.

We can also say that we metabolize every experience. If we go out and see something beautiful, it becomes imprinted within us. When we listen to Maharishi lecturing on enlightenment, we metabolize that experience to whatever extent we are able, and it becomes part of us. Memory is stored throughout the physiology—in fact, there are memory systems at every point in the body. There is memory storage in the smallest cells, in the spinal cord, the brainstem, and the cerebral cortex. The main access, however, is through the hippocampus, which explains why the performance of the *Ashwamedha Yagya* occurs in the Vedic Literature at times of great transformation. When

we say that a horse is sacrificed, it is as if the hippocampus is being rebooted and new software is being loaded into it to create a new reality. We are the same person, but with new software and a new understanding.

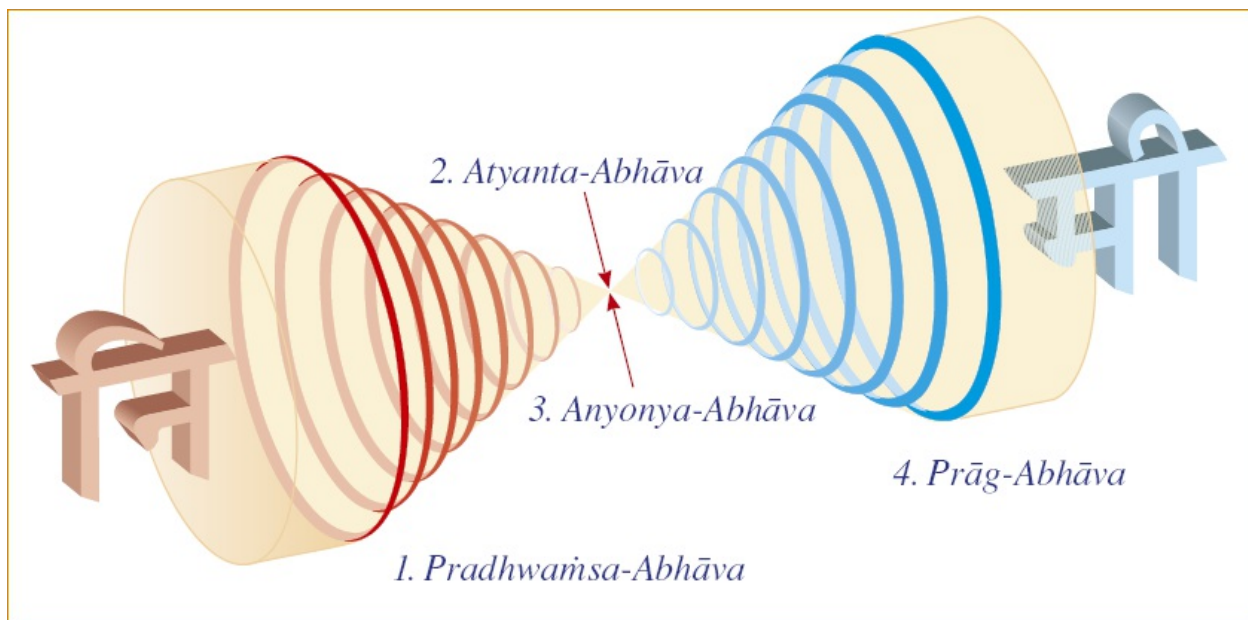
When we attain enlightenment we regain our true memory, for the reality of life is always present whether we are aware of it or not. This theme is beautifully described in the Bhagavad-Gītā, when Arjuna was enlightened by Lord Kṛishṇa on the battlefield. Arjuna exclaimed that his delusion was destroyed, all his doubts dispelled, and that he had regained his memory:

नष्टो मोहः स्मृतिर्लब्धा तद्दद्यत्प्रसादान्मयाच्युत  
स्थितोऽस्मि गतसंदेहः करिष्ये द्दद्यचनं तद्दद्य

*Nashto mohaḥ smṛtir labdhā twat-prasādān mayāchyuta  
sthito 'smi gata-saṁdeha karishye vachanam tava  
(Bhagavad-Gītā, 18.73)*

*My delusion is gone, I have regained my memory from your grace, O  
Immovable One. I am firmly established, my doubts are gone, and I am  
ready to do as you ask.*

In the dawning of enlightenment, all past memories of apprehension, anxiety, and fear are cleared away and new software, the software of enlightenment, is activated. This is the transformation that occurred after the *Ashwamedha Yagya* of King Dasharath. Rām was not present before the *Yagya*, but appeared as a result of the *Yagya*. The *Ashwamedha Yagya* represents the process of transformation within the gap that Maharishi has likened to the shape of a *Damaru*, an Indian drum. In figure 9.8 we see the collapse of one syllable into the gap and the emergence of a new syllable, in the shape of a *Damaru*.



**Figure 9.8 The four stages of the transformation of one Vedic Sound into another within the silent gap between them (e.g., between the syllables ni नि and mī मी)**

The experience of this collapse and emergence is open to everyone through Maharishi's Vedic Programmes, including his Transcendental Meditation and TM-Sidhi Programme, Maharishi *Yagya*, Vedic Sound Therapy, and other Vedic Technologies. Through the regular practice of the Transcendental Meditation and TM-Sidhi Programme, all our stresses and their associated memories are dissolved, and in time we realize our cosmic status—we no longer see ourselves in terms of small things such as our body, our family, our society, our nation, our world, or even our universe.

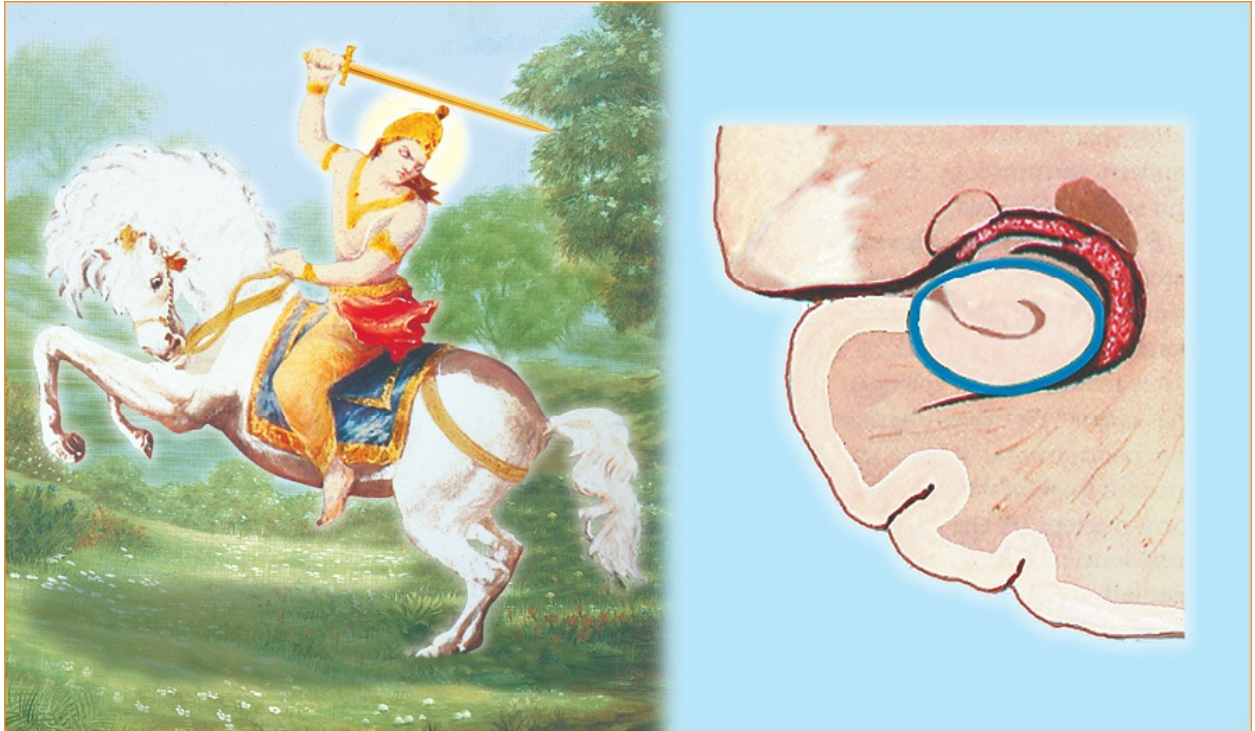
When we regularly practise Transcendental Meditation, we begin to experience that we are indeed infinity. Even if initially we only briefly have the experience, with continued practice it becomes increasingly permanent, until one day we are able to say, 'Yes, I am that Reality. This is what I am'. This is one level of meaning of the beautiful expression from the Bṛihad-Āraṇyak Upanishad:

अहं ब्रह्मास्मि

*Aham Brahmāsmi*  
(*Bṛihad-Āraṇyak Upanishad, 1.4.10*)

*I am Totality—Brahm—I am singularity—I am self-referral  
consciousness.*

In that moment we recover the memory of who we truly are. This is the significance of the *Ashwamedha Yagya*—the process of transcending, removing stresses and strains, and regaining the memory of who we really are. In the course of this *Yagya* past memories are annihilated, and a new, higher consciousness emerges.



**Figure 9.9 Kalki's horse corresponds to the hippocampus.**

Of the ten incarnations of Lord Viṣṇu, the last is Kalki, who is said to be

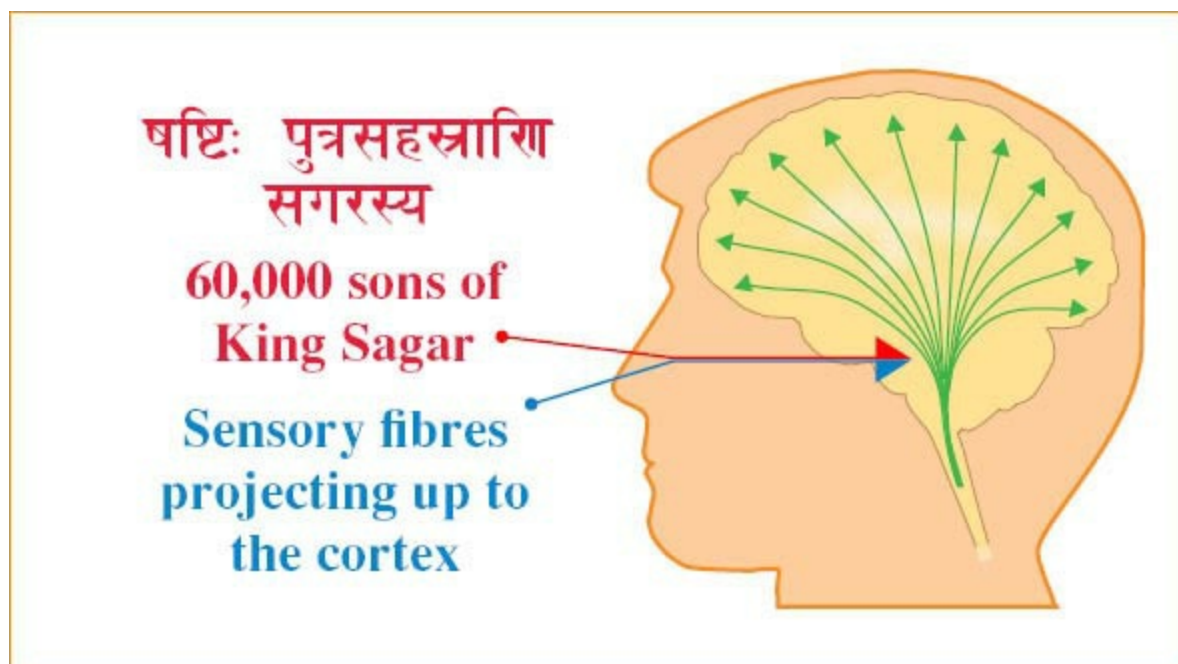
sitting on a white horse. This horse corresponds to the hippocampus.<sup>3</sup> The value of Kalki therefore is in bringing back the memory of Wholeness. It is said that Kalki will destroy and kill, but what he kills are the memories and stresses that grip and connect us with small things. Kalki removes them and allows us to associate ourselves with infinity. Kalki is already within us, along with the other *Avatārs*. We don't have to wait until he is incarnated, for he already exists within our physiology. And we have within us the technology of the *Ashwamedha Yagya*, the technology to remove our old memories and stresses, and completely replace them with the memory of our true, unbounded, infinite, cosmic nature.

King Sagar's release of the horse is the creation of an impulse to destroy every remnant of the old paradigm in order to create a new paradigm. The 60,000 sons who excavated the Earth are the fibres coming from all the sensory systems, which collect old information and literally excavate the entire brain. We can understand this in terms of the stage of brain development in which nerve cells and fibres travel inside the nervous system to create passageways for themselves. And when the sons found Vishṇu and were annihilated, it means that they had fulfilled their goal. It is not the case that they died, but rather they had completed the task of bringing sensory information to the higher parts of the brain. This aspect of Vishṇu corresponds to the layers in the cortex that can inhibit or annihilate excessive sensory information.

Trillions of sensory inputs bombard the brain every second. If these were not damped or inhibited the result would be chaos, and the body would find itself in a state of extreme agitation. The cortex makes use of these powerful mechanisms to inhibit and control the enormous quantity of incoming sensory information, and attend only to those sensations that are useful. Vishṇu, who is dynamism, takes in all dynamism and settles it down and harmonizes it by means of his ability to inhibit unnecessary information. If, however, disease or drugs block the inhibiting ability of the brain, it may result in uncontrollable seizures. The 60,000 sons of Sagar, the sensory fibres



projecting up to the cortex, are very important, but in the end their influence is inhibited and harmonized by Vishṇu, by Wholeness—they as if vanish in the presence of Vishṇu within the brain.



**Figure 9.10 The 60,000 sons of King Sagar correspond to the sensory fibres projecting up to the cortex.**

We evolve by leaving behind our past memories, which are limited and small, and by opening our awareness to a more expanded reality. The understanding of how to do this is the enormous blessing of Maharishi, Guru Dev, and the Holy Tradition of Vedic Masters. They have given us these technologies so that it is possible for each of us to perform the *Ashwamedha Yagya* within ourselves, and to play and replay the entire Rāmāyaṇ within ourselves. This *Yagya* helps remove obstacles from the past so that we may evolve quickly toward enlightenment. If we desire the most rapid and complete evolution, then in addition we must live in a proper house, eat proper food, and have an ideal routine.



## ***Sarga 41–44: Gangā Cleanses the Sons of King Sagar***

In *sarga* 41–44, we see the continuation of the events leading to the immolation of Sagar’s 60,000 sons at the hand of Kapila, who was Vishṇu disguised as a *Ṛishi*. We understand that Sagar’s offspring are the sensory input systems, which have created pathways throughout the brain leading to the cortex, where they become harmonized. These impulses of excitation are inhibited and harmonized by the wholeness of Vishṇu.

In *sarga* 41 we see that there was no water with which to perform the proper ceremonies for the passage of Sagar’s sons. However, Brahmā sent Gangā down to Earth so that the flow of water would carry the sons to a heavenly abode, where they could live in a new state of evolution. This corresponds to a transformation from specific to holistic. We have already described Gangā and her tributaries in the brain as the cerebrospinal fluid, which sustains brain structures, in particular the cortex and the inner parts of the brain. The cerebrospinal fluid is not only a soothing, supportive fluid, it also has a nourishing quality that protects the brain and nervous system from sudden damage or pressure. Cerebrospinal fluid surrounds and permeates parts of the brain and exchanges nutrients with some areas, particularly where there is a limited or complete absence of blood flow.

Gangā descended upon Lord Shiva’s head because the Earth could not bear its strength and power. Gangā is an aspect of *Prakṛiti*, and Shiva is, of course, *Purusha*. Only the holistic value of Shiva could uphold Gangā’s mighty flow. Similarly, it would be unbearable if the cerebrospinal fluid were to move freely inside the nervous system—it would disrupt the normal functioning of the neurons and the release of neurotransmitters, essential for communication within the brain. In order for us to have a holistic experience of life, the neurotransmitters and ions must remain in their role, undiluted.

For example, when we look at a single flower there are literally millions of

sensory inputs concerned with colour, shape, texture, and scent, which must be transmitted to the brain. Ultimately, all these inputs are harmonized by the brain, which builds a picture, gives it a name, and provides the experience of the flower. All the information entering the nervous system is first analysed and then reconstituted to create the wholeness of the flower. This requires specific inputs, as well as integrative functions that can generalize these inputs into a holistic entity and give it a name.

If the cerebrospinal fluid permeated all parts of the brain, it would literally wash away the biochemical ions and molecules that are needed for accurate sensory analysis, and we would not be able to experience the flower. This is the reason that the Earth was unable to withstand Gangā's weight, strength, and power, and thus Gangā had to flow down onto Shiva's head. Shiva is located in the gaps and hollow spaces, especially in the ventricles at the centre of the brain. The cerebrospinal fluid flows in this silent, powerful inner core, into the ventricles where it has the value of a transcendental *Prakṛiti*, enveloping and covering. In *sarga* 43 we see that Gangā washed away the sons of Sagar, who then went to Heaven with their specificity melted and diluted, merged into the infinite, transcendental Wholeness.

### ***Sarga* 45–47: The Churning of the Ocean for the Nectar of Life**

In *sarga* 45–47 Vishwāmitra related the story of the churning of the ocean.<sup>4</sup> He recounted how the *Devatās* had wished for immortality, and how Viṣṇu had suggested that they churn the ocean for the nectar of life, *Amṛit*, which would help them overcome the curse of mortality and attain eternal life. The *Devatās* called upon the *Asuras* (a kind of demon) for their help, and together they used the mountain called Mandara as a churning rod, and the huge snake Vāsuki as the churning rope. Once the churning began, Mandara began to sink into the ocean of milk. To save the endeavour, Viṣṇu took the form of Kūrma, a tortoise, and lifted the mountain onto his back.

One interesting aspect of the story is that a poison emerged when the

churning was almost complete, which Shiva drank in order to save the *Devatās*. The poison stopped in his throat, but according to the Purāṇ it created a distinct small, dark colouration in his neck. This poison corresponds to dopamine, a powerful neurotransmitter that creates huge changes in perception, and which must be properly maintained and controlled to prevent it from creating imbalances and hallucinations.

Dopamine is produced in the substantia nigra, located in the brainstem at a level corresponding to the discolouration of Shiva's neck. The term substantia nigra is Latin for 'dark, black substance' and refers to its characteristic dark colouring.

Vishṇu's incarnation as Kūrma, the tortoise, corresponds to a part of the brain that resembles a tortoise shell, which sits near the hypothalamus and holds the pituitary gland. The churning of the ocean is like the churning of the whole physiology by the hormonal system, which is controlled by the pituitary gland. It is the basis of the digestive and other metabolic processes that nourish and sustain the physiology, just as the churning of the ocean produced the *Amṛit* that nourished the *Devatās*.

Another interpretation of the story is to view the ocean as the inner functioning of the brain. The *Devatās* pulled on the right side of the rope and the *Asuras* pulled on the left. The rope corresponds to specific association fibres of the corpus callosum that cross from one side of the brain to the other, above the ventricles. The churning is between the right side, which is responsible for generality, and the left side, which accounts for specificity. This process is part of every experience that we have: we must be able to see the specific in terms of the holistic value in which all the parts are connected together. A constant churning takes place between the specific and the general in the physiology, and the outcome determines the type of experience. If the churning is perfect then we will have beautiful experiences of bliss. This is the effect of the *Amṛit*.

These *sarga* include other stories for Rām's education. For example there is

the story of Indra and the mischief he created when he stole the sacred *Yagya* horse from Sagar. In our discussion of later *sarga* we will see how Indra often creates magical and mischievous events, often leading others astray, sometimes changing himself into other beings and sometimes disappearing and reappearing. Indra is the mind because he is the king of the *Devatās*, and can take us in any direction and create any kind of illusion. The mind has the power and flexibility to induce *Māyā*, the misunderstanding of reality, which can lead to situations that may appear negative or life-damaging, but which in fact serve as challenges that become an opportunity for growth and evolution.

### ***Sarga 48–51: The Story of Rishi Gautam and Ahalyā***

During their travels, Rām, Lakshmaṇ, and Vishwāmitra arrived at the deserted *Āshram* of Rishi Gautam. There Vishwāmitra told the story of Gautam cursing Ahalyā (his *Patnī*) because she was misguided by Indra, who had made himself look like her husband. When Gautam discovered Indra's mischief, he first cursed Indra and then Ahalyā, turning her into stone for thousands of years.

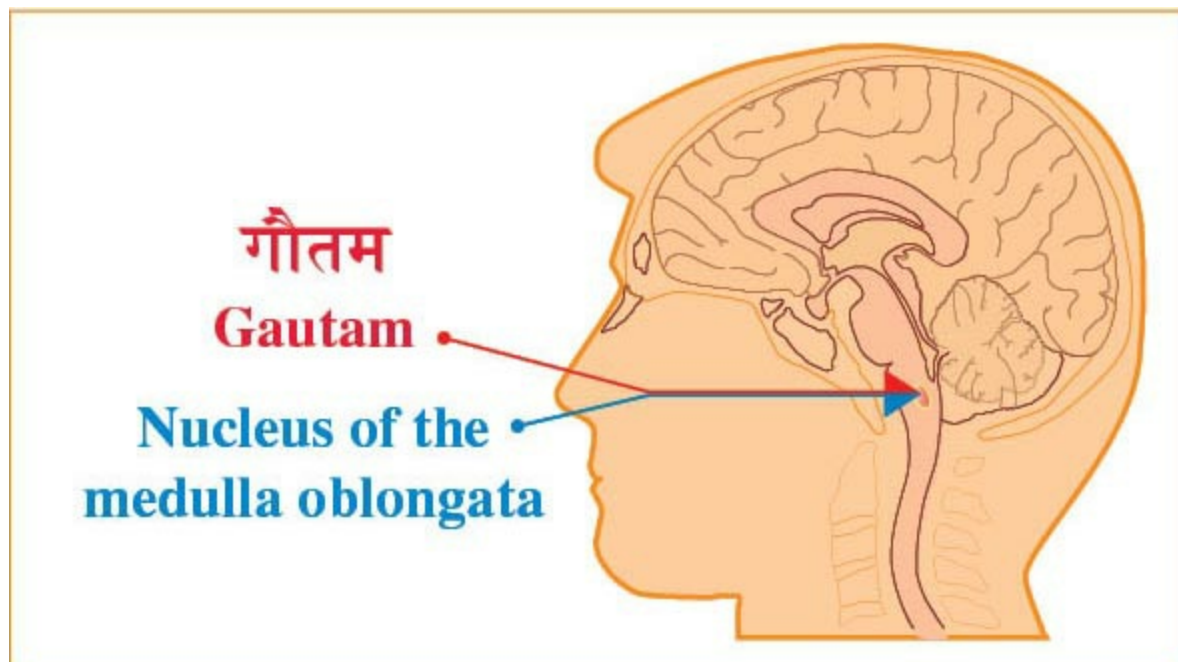
Gautam was the father of Rishi Shatānanda, King Janaka's family priest. Janaka was the foster father of Sītā, whom we have located in the human heart. Janaka corresponds to certain autonomic ganglia near the heart, which adjust the heartbeat in accordance with the body's requirements. When we experience our heart rate increasing as we run or decreasing as we rest, it is because of these autonomic ganglia. The autonomic ganglia in general serve as the regulators of the body's internal systems, controlling many different functions. For example, when we run, our heart rate must increase to meet the demands of the muscles involved in running. The ultimate control mechanisms regulating heart rate and blood flow involve important areas in the central nervous system that send information to the autonomic ganglia, so that they can administer the different activities. From the point of view of the heart and blood vessels, the ganglia are the local rulers responsible for adjusting the functioning of their activities. We will consider King Janaka in

greater detail in the next chapter.

Shatānanda, the son of Gautam and Ahalyā, was a *Ṛishi* who corresponds to a nucleus in the brainstem that is directly connected to both the cardiovascular system and the autonomic nervous system. Within the lower part of the brainstem, the medulla oblongata, there are areas known to be involved in the control of the cardiovascular system through the parasympathetic and sympathetic nervous systems. This area has feedback loops within it that monitor the activities of both the heart and circulatory system. The *Ṛishis* are integrating, and correspond to the feedback loops that make everything function in accordance with Natural Law.<sup>5</sup>

Each *Ṛishi* is responsible for a different function. Vishwāmitra, for example, is responsible for balance, while Vasishtha oversees the planning and execution of action. Shatānanda is a *Ṛishi* who is also Janaka's family priest, and Janaka is the autonomic ganglia that control the heart, and which integrate the requirements of the heart, Sītā, with the functioning of the autonomic nervous system. We can therefore locate Gautam and Ahalya's son as a nucleus in the medulla oblongata, which regulates cardiovascular functioning.

Gautam's *Patnī* Ahalyā corresponds to the artery of the medulla oblongata, which sustains the dorsal motor nucleus of the vagus. The curse that turned Ahalyā to stone describes the formation of arteriosclerosis, during which an artery hardens, becoming blocked and inflexible as a result of the build-up of calcium deposits—it becomes like stone. This hardening prevents it from supplying nourishment.

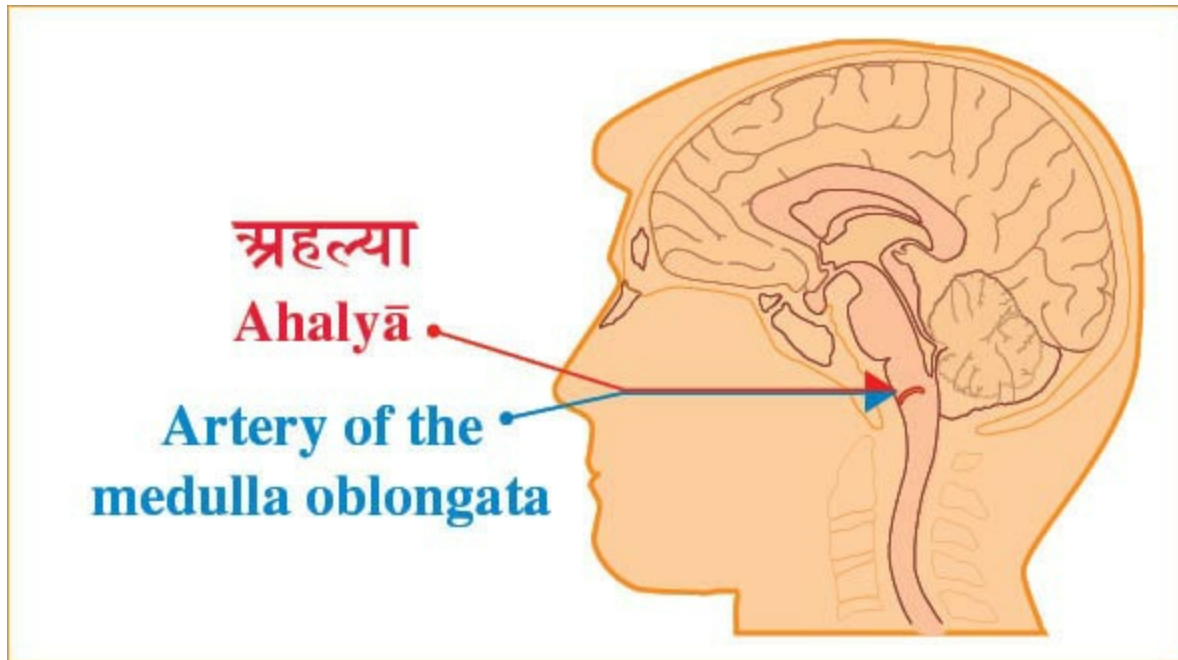


**Figure 9.11 Rishi Gautam corresponds to a nucleus of the medulla oblongata.**

Hardening of the artery occurs through the instrumentality of Indra, the mind, in the form of the creation of a stress, a kind of illusion that is not in tune with Natural Law. The stress results in increased blood pressure and damage to the artery, leading to its hardening. It can even cause the formation of a thrombus, or a blood clot resembling a stone, which can result in blockage. If, for example, a cerebral artery hardens and has a thrombus, the blood flow to the brain will be obstructed, resulting in the death of some of the brain's tissues.

Rām touched the feet of Ahalyā's stone form, removing the curse and enabling her to live again. When Ahalyā came into contact with Rām, the wholeness of the physiology was re-established in perfect harmony, perfect function. The holistic value of Rām reversed the arteriosclerosis and the hardening disappeared, allowing blood to again flow properly.





**Figure 9.12 Ahalyā, Rishi Gautam’s Patnī, corresponds to an artery of the medulla oblongata.**

Once Ahalyā was healed, she served Rām food and took care of him. This means that when an artery is unblocked, blood flow can resume and bring nutrients to the structures it is intended to supply. We see again that Rām is taking over each part of the physiology, healing inflammatory processes, removing abnormal arteries, and unblocking hardened arteries.

The wholeness of Rām is experienced during the process of transcending, which brings our physiology back to Wholeness. Published research on Maharishi’s Transcendental Meditation programme shows clear evidence of the reversal of the process of arteriosclerosis. The story of Ahalyā is an example of how the experience of pure consciousness can transform even hardened arteries back to their normal state.

It is critical to be in tune with Natural Law at the beginning of life—to practise Transcendental Meditation and listen to the recitations of the Vedic Literature, because these will promote the formation of the healthiest and most useful arteries and veins. The Vedic Sounds are the most fundamental

value of our physiology. The physical matter of our body emerges from these vibrations, and as we saw in Chapter I, the 40 branches of Veda and the Vedic Literature are the blueprint of our body. Clinical research has shown that the Maharishi Vedic Vibration Technology, which employs Vedic Sounds, helps reduce and even eliminate chronic disease.<sup>6</sup> If a child is exposed to the appropriate sounds of the Veda at a young age, it will have an opportunity to build a healthy and strong physiology with no obstructions or abnormalities, in which all growth is balanced. By enlivening Wholeness in the body, Rām will be nourished and awake to his full value.

The Rāmāyaṇ reveals that Rām is able to reverse any situation, remove any obstacle, and restore fullness. Rām is *Brahm*, Totality. When the human brain is fully developed it has the ability to act upon the physical structures of the body and unblock any stress. Rām can bring us back to a state of optimal functioning if anything goes awry, or occurs in an untimely way, even if we are overshadowed by the veil of *Māyā*.

This is Maharishi's great knowledge that he gave to the world: everyone contains Wholeness and everyone can enliven that Wholeness no matter what has happened before. 'Don't think of the past', Maharishi tells us. When we run we don't look back, we only look forward. With Maharishi's Transcendental Meditation and TM-Sidhi programme including Yogic Flying, with Maharishi *Yagya*, Maharishi Jyotish, Maharishi Sthāpatya Veda, Maharishi's Vedic Sound programme, and with all the other Vedic Technologies and Programmes that Maharishi has given to the world, everyone can now attain perfection. Rām can be enlivened in each of us.

### ***Footnotes***

1. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 358–359.

2. See Chapter I, [Self-Interacting Dynamics of Consciousness as Sounds of the Veda](#).

3. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 373.

4. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 354–355.

5. See [Chapter VI](#).

6. A Double Blind Randomized Controlled Trial of Maharishi Vedic Vibration Technology in Subjects With Arthritis, *Frontiers in Bioscience* 6, h7–17, April 1, 2001.



# Chapter X

## *Bāl Kāṇḍ, Sarga 52-76*

### *Sarga 52–56: The Story of Shabalā*

*Sarga* 52–56 reveal the nature of the relationship between Vasishtha and Vishwāmitra. This story is also found in other parts of the Vedic Literature, but these *sarga* depict Rām hearing it for the first time.

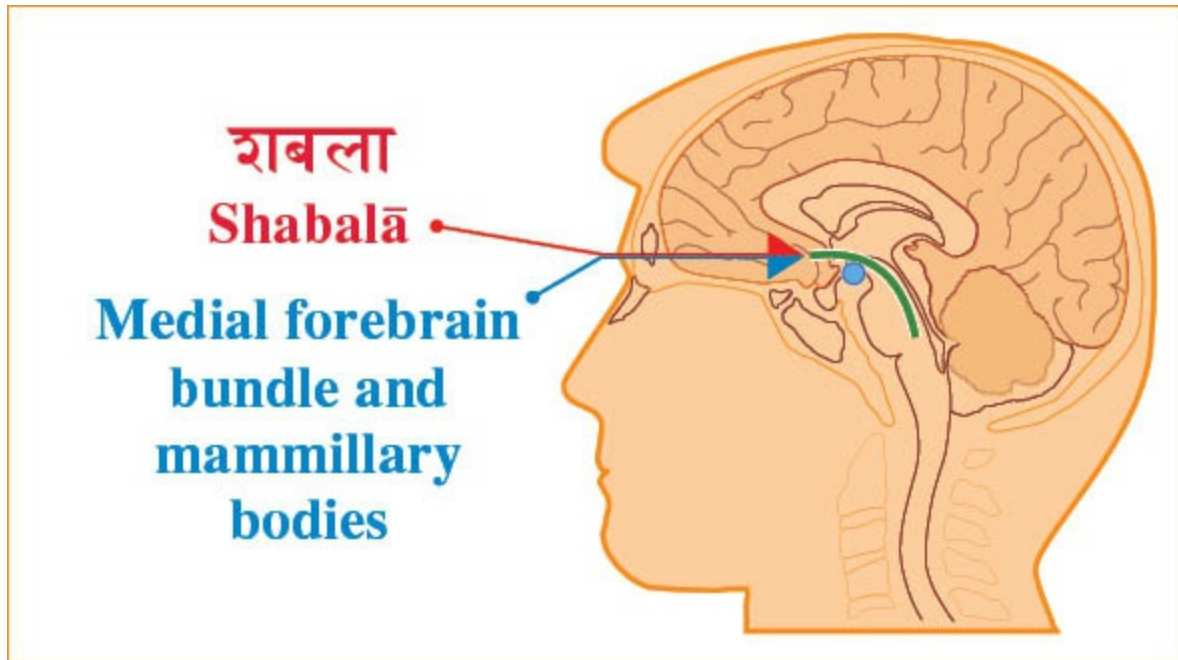
The story relates how Vishwāmitra once discovered that Vasishtha was in the possession of a special cow named Shabalā—or Kāmadhuk, ‘the wish-yielding cow’—who was able to produce whatever Vasishtha requested:

एद्धद्यमुक्ता द्वद्यसिष्टेन शबला शत्रुसूदन  
द्विद्यदधे कामधुक् कामान् यस्य यस्येप्सितं यथा

*Evam uktā Vasishthena shabalā shatru-sūdana  
vidadhe kāmadhuk kāmān yasya yasyepsitaṁ yathā  
(Bāl Kāṇḍ 53.1)*

Shabalā, the cow of plenty, having thus been addressed by Vasishtha, fulfilled the desires of every individual.

After seeing Shabalā produce a magnificent feast for himself and for his army at Vasishtha’s request, Vishwāmitra became overshadowed by his desire to possess the cow. Vishwāmitra asked Vasishtha to give Shabalā to him and even attempted to take her by force, but to no avail. Vasishtha refused to let her go.



**Figure 10.1 Shabalā, the ‘wish yielding cow’, corresponds to the medial forebrain bundle and mammillary bodies.**

Shabalā corresponds to the medial forebrain bundle and the mammillary bodies, which are a set of structures located within the base of the brain. The mammillary bodies resemble a cow, and both the medial forebrain bundle and mammillary bodies are involved in the activation of parts of the nervous system related to desire and emotions, and to fulfilling desires. They are directly and indirectly connected and profoundly interact with Vasishtha in the physiology in his various incarnations, first as the general somatic sensory column of the brainstem with its role in touch, vibration, pain, heat, and cold; second as the mind and its importance in desire and fulfilment of desire; and third, with the globus pallidus, an area of the brain that helps organize the performance of action according to the highest possible plan. These counterparts of Vasishtha in the human physiology are therefore related to the senses, which are the most physical expression of desire; to the mind, which carries the desire and the perception of fulfilment of desire; and to the structures in the physiology that ensure that action and behaviour are balanced and conducive to evolution, growth, and progress in tune with

Natural Law. This is the reason that this very special ‘cow’ had to remain with Vasishtha. Otherwise there would be a danger that a desire might lead one off the natural evolutionary path.

After his first defeat by Vasishtha, Vishwāmitra retired to the Himālayas to perform *Tapas*, or ‘austerity’, which means that he completely withdrew his sensory attention from the outside world and directed it toward the inner Self. This is transcending. As a result of his long *Tapas* (transcending, going back to the Self in pure silence, gaining deep rest as the basis of dynamic action), he received a number of *Astras*, or divine weapons (the ability to perform dynamic, well-targeted action on the basis of deep rest and re-invigoration of the nervous system, which in the nervous system means generating nerve impulses) from Lord Shiva (infinite silence as the basis of infinite dynamism), which he directed at Vasishtha’s *Āshram* (the areas of the brain where Vasishtha is located). Vasishtha, however, defeated him again (the nerve impulses generated by Vishwāmitra did not disturb the balance in Vasishtha’s brain areas). At that point Vishwāmitra embarked upon a period of even more *Tapas*, with a view to attaining the status of a *Brahm-Ṛishi*.

### ***Sarga 57–65: Vishwāmitra Becomes a Brahm-Ṛishi***

Vishwāmitra wished to evolve from a *Rājā-Ṛishi* (a royal *Ṛishi* of the *Kshatriya* caste) to a *Brahm-Ṛishi*, a *Ṛishi* and also a knower of *Brahm*. *Sarga 57–65* describe in detail how he ascended to this new status. This story reveals that at whatever point we may be in our evolution, we have the potential to develop the supreme state of Wholeness and perfection.

In order to prepare for his change of status, Vishwāmitra undertook a long period of *Tapas*, which we just saw is the experience of transcending, directly experiencing pure Being. In the *Bāl Kāṇḍ*, we find the following description of Vishwāmitra setting out to perform his *Tapas*:



स दक्षिणां दिशं गत्वा महिष्या सह राघवद्वय  
तताप परमं घोरं द्विद्यश्चामित्रो महातपाः

*Sa dakṣiṇām disham gatwā mahishyā saha Rāghava  
tatāpa paramam ghoram Vishwāmitro Mahātapāḥ  
(Bāl Kāṇḍ, 67.2)*

*Proceeding to the southern direction with his queen, Vishwāmitra, of  
great austerities, performed supreme and sublime Tapas, O Rām.*

In this verse we also see Vishwāmitra described as *Mahātapā*, ‘one of great *Tapas*’, which means that as a result of his long meditations he is already firmly established in Being.

The field of pure consciousness, to which Vishwāmitra took recourse, is the field of transformation. Maharishi has described the process of transformation in the context of the sequential unfoldment of Veda and the Vedic Literature, explaining how each sound, or collection of sounds, collapses into silence and emerges as a new structure of sound. Through this process of transformation in the gaps between the different structures of Vedic Sound, the entire forty branches of Veda and the Vedic Literature unfold sequentially in more elaborated values.<sup>1</sup> These same mechanics of transformation take place during the performance of *Yagya*. For Vishwāmitra, the transformation from a *Kshatriya* into a *Brāhmaṇa* was based upon his ability to have a desire (*Sankalpa*) to become something different, and then to go deep into the field of pure Being—to become established in the pure silence of *Atyanta-Abhāva*. In this way he emerged as a *Brāhmaṇa*.

The interaction of the vestibular system with the basal ganglia helps ensure that different parts of the brain develop their full range of connections, so that the sense of balance reaches its most refined level, and every action is smooth

and precise. The development of the more refined aspects of balance is especially important for certain evolutionary actions, such as the performance of *Yagya*. Vishwāmitra living at the lower level of *Rājā-Rishi* indicates a time when these connections are not fully developed, but as a *Brahm-Rishi* he represents the development of all connections within the brain, as well as a perfected state of mental and physical balance.

The vestibular system is present in many different species of animals, whereas the globus pallidus, Vasishtha, is only found in more highly evolved species. These areas are complementary and supportive systems with interacting functions, but they are nonetheless separate and responsible for different activities. Together they provide the greatest possible level of precision and balance in action.

*Sarga 58* introduces the story of King Trishanku, who wished to ascend bodily into Heaven. Vasishtha told Trishanku that it was not possible, but Trishanku nonetheless appealed to Vasishtha's sons. The sons were angry at his attempt to circumvent their father and cursed him. Trishanku finally turned to Vishwāmitra, who attempted to send him to Heaven. The *Devatās*, however, were displeased, and asked Vishwāmitra to relent. In the end they reached a compromise whereby Trishanku was allowed to remain suspended between Heaven and Earth, living in perpetual, heavenly bliss.

We can better understand the location of Trishanku by analysing the etymology of his name. The Sanskrit *tri* means 'three', and *shanku* refers to a 'nail' or 'peg'. Trishanku is located in the area of Vishwāmitra, the vestibular system, where a tiny bone with three horn-like structures hangs in the inner ear. This bone is located between the brain and body—between Heaven and Earth. A tradition holds that when Trishanku was sent out of Heaven, a bit of his saliva fell to Earth and created the Karmanāsha river. In his location in the physiology there is a secretion of fluid that lubricates the inner ear, which can reach the mouth. This is the river Karmanāsha in the physiology.

When Trishanku was initially excluded from Heaven, Vishwāmitra became

angry at his own inability to fulfil his promise, and decided to create his own worlds. He wanted to create an entirely new universe. The *Devatās* objected because in doing so he was disturbing creation. The dispute was resolved by an agreement allowing Trishanku to remain suspended between Heaven and Earth while Vishwāmitra relinquished his idea of bringing forth a new creation.

Everyone has individual perceptions and assessments of reality based on expectations, education, prejudices, emotions, and other factors, and therefore it is possible to say that to some extent everyone lives in their own universe. However, our brain also has the potential to create an imaginary world. Parts of the brain can split or disassociate from other parts, creating conditions such as dissociative identity disorder, in which a single individual displays several distinct personalities; or one can experience a state of schizophrenia, with hallucinations in which unreal imaginary experiences are perceived as real world experience. These deranged forms of brain functioning are a different consideration in that they are far removed from the common perception of reality, are not in tune with Natural Law, and do not allow for balanced evolution and healthy growth. The creation of a new world is always possible, but it can be a threat to evolution if it is not in tune with the holistic scheme of Natural Law.

Everything must be in its appropriate place in order for growth and evolution to progress. No matter how powerful we are, we must ultimately integrate ourselves with Wholeness. For this reason we must always remain connected to the Self. There are many factors in the world that might attract us to create an alternate reality or to proceed in some wild direction, because of the powerful creativity and intelligence present within every one of us. Unfortunately, if this creativity is not in tune with Wholeness it may be harmful—and even dangerous—to one's self and to others. This is also true for what we invent, what we adopt as systems of education, economy, defence, health, etc.

Consider, for example, the discovery of the power of the atom, which resulted in the development of the atomic bomb. It was a very creative and powerful investigation into the Laws of Nature, yet it resulted in the potential annihilation of the world. Another example is modern medicine, which has created drugs that seem helpful on one level, but which have highly negative side effects. Our creativity must be in tune with Wholeness, with the totality of Natural Law.

Medical doctors and scientists tend to describe the body as a collection of physical parts and not in terms of its essential nature, consciousness. Their training neglects the holistic and harmonious basis of Natural Law, which connects and upholds everything through the perfect, orderly, sequential flow of Veda. This approach has led to an emphasis on removing the symptoms of disease rather than on restoring perfect health, and an inability by members of the medical profession to even conceive of the complete development of body and mind.

Rām's education here is through a series of meaningful stories, which he integrated into a holistic viewpoint of evolution in tune with Natural Law. Each of us has the potential to transform our physiology so that we can live the reality of *Brahm*, Totality. This is what Maharishi has offered to the world—the ability to rise to the status of the ruler of the universe, living Wholeness and Totality in every aspect of life.

### ***Sarga 66–72: The Meeting with King Janaka***

In *sarga* 66, Vishwāmitra introduced Rām to King Janaka, whom we know as Sītā's foster father and the embodiment of the autonomic ganglia controlling the heart. The relationship between the autonomic ganglia and the heart is similar to that of a foster father and daughter, in that the heart and autonomic ganglia are derived from different sets of tissues during embryonic development. Janaka found Sītā in a field, took her in, protected her, and gave her whatever she needed, but in actuality she was born from the furrow of a field, a child of Mother Earth.

The field in this case represents pure Being, the infinite, unbounded field of Shiva, Viṣṇu, and Brahmā, the field of silence and dynamism, the field of total *Purusha*. Within *Purusha* is *Prakṛiti*—*Prakṛiti* is within *Purusha*. This is a beautiful description of the holistic value of *Prakṛiti* embodied by Sītā.

*Pragyāparādh* is the mistake that the unenlightened intellect makes in the field of change, separating diversity from Unity and perceiving it in terms of differences, to the exclusion of Wholeness. The phenomenon of *Pragyāparādh* explains why Sītā seems to be different from Rām. Even though there is ultimately no difference between *Purusha* and *Prakṛiti*—in reality each is an aspect of the other—due to the ignorance of intellectual analysis they are seen as separate.

Ultimately everything is the Unified Field, but when science analyses the world it does so in terms of individual parts, such as molecules and atoms. In the same way, Rām and Sītā appear to be separate because from an intellectual point of view one is the brain and the other is the heart. From the perspective of Unity Consciousness this is an illusion, but in order to discuss them in terms of the body we must separate the heart from the brain.

Sītā is the incarnation of Mahālakshmī, Mother Divine, embodied by the cardiovascular system and in particular the heart. We have seen that the vessels correspond to the various feminine personalities of the Rāmāyaṇ, with the heart being the centre of the body's nourishing power. This is where Mahālakshmī is present, with her four arms corresponding to the heart's four chambers.

Janaka, the autonomic ganglia controlling the heart, sits next to the heart and protects it. In the narrative Janaka wanted to be sure that Sītā married someone worthy. He knew that because Sītā was *Prakṛiti* her husband must also be the embodiment of total Natural Law. Janaka therefore established the condition that only one able to string Shiva's bow could marry Sītā.

Shiva's bow is the vertebral column, which supports the entire nervous

system. The nerves that direct the movements of the body extend from the spinal cord, which sits inside the vertebral column. These nerves enable us to raise our arms, sit, stand, or walk: the muscles cannot move except from commands given by the nervous system through the spinal cord—commands from within Shiva’s bow.

Up to this point no one had been able to even lift Shiva’s bow, much less string it. Rām, however, not only lifted and bent it, he actually cracked it, creating an immense sound that reverberated throughout the entire universe, as we see in the following verse:

तस्य शब्दो महानासीन्निर्घातसमनिःस्फुटनः  
भूमिकम्पश्च सुमहान्पर्वतस्येव दीर्यते

*Tasya shabdo mahān āsīn nirghāta-sama-niḥswanaḥ  
bhūmi-kampash cha sumahān parvatasyeva dīryate  
(Bāl Kāṇḍ, 67.18)*

*A great sound like thunder arose, followed by an enormous earthquake,  
sounding like a mountain breaking asunder.*

The breaking of Shiva’s bow bears great significance on several different levels. On the most profound level, Maharishi has likened it to the process of symmetry breaking, in which Unity appears to break apart because of the flow of dynamism within it. This is comparable to the description of the big bang of creation, in which the universe emerged from unmanifest nothingness. In this context, the sound of the bow breaking represents the reverberation of Veda.

Shiva’s reality is infinite peace and infinite silence, totally smooth and flat, which corresponds to the bow. When Rām broke the bow, it was as if Vishṇu, the dynamism inherent within silence, was revealed within Shiva. This is the dynamism of Rām, of Vishṇu, which allows the expression of the power of



Shiva's silence into activity.

The challenge presented to Sītā's suitors was intended to determine who could produce dynamism within silence. The only individual competent to do this was Rām, for he is the embodiment of *Brahm*. Rām is the incarnation of Vishṇu, but Shiva is eternally within him. Shiva is within the heart of Vishṇu just as Vishṇu is within the heart of Shiva—silence is within dynamism and dynamism is within silence.

Physiologically, the breaking of the bow corresponds to the creation of openings in the vertebral column, which allow the nerves to emerge. The vertebral column includes exquisitely constructed fissures that enable the nerve fibres to extend from the spinal cord to the peripheral nervous system, and to the different muscles and organs. The nerves are like Rām's arrows in that they carry impulses from the central nervous system to the body's periphery. If the vertebral column was completely solid, without a crack or opening, it would be impossible for nerve impulses coming from the brain to enter the spinal cord to activate the different muscles and organs, and as a result we would be rigid and static. By sending its impulses through the vertebral column, the holistic functioning of the brain and central nervous system is taking control of the cardiovascular system and becoming Sītā's lord and husband.

From still another perspective, Rām breaking the bow represents *Brahm* taking over *Prakṛiti*, *Purusha* taking *Prakṛiti* under its control, and in this sense it is the story of the unification of *Purusha* and *Prakṛiti*. Rām is *Brahm* and *Brahm* is Totality, the relative and the absolute together, the unified value of specific and general. Rām was taking into his reality the total field of action, the total field of manifestation, expressed through *Prakṛiti*, embodied by Sītā.

There were many other kings with a natural desire to marry Sītā, but they did not understand who she really was. They saw her as a specific value, not as the embodiment of *Prakṛiti*. This misconception was also the basis for

Rāvaṇ's abduction of Sītā, which we will examine in detail in Chapter XII. There we will find that Rāvaṇ is located in the cerebellum, the seat of Vaisheshik, which is a branch of the Vedic Literature representing specificity. Rāvaṇ, we will see, is an extreme form of specificity that must be brought back to Wholeness by Rām.

Rām is destined to be the ruler of the universe. Inherent within him is the ability to comprehend and activate the full value of *Prakṛiti* while remaining completely self-referral. This ability to fathom a wider and expressed range of Natural Law, a broader comprehension of *Prakṛiti*, can be seen in the most responsible members of any society, and in the wisest sages and teachers in any field. Men and women whose nervous systems are able to comprehend the deeper values of Natural Law naturally take on greater responsibilities.

Most of the conflicts depicted in the Rāmāyaṇ arose because a character was unable to maintain a vision in which the qualities of specific and holistic, partial and total, were seen in proper balance. This leads to negative emotions, such as deception, fear, and anger, and creates problems and conflicts. Rām overcomes all these problems and imbalances, and puts the specific values in proper order. The specific can exist and be completely life-supporting for us and for our society as long it is tune with the holistic.

### ***Sarga 73: Rām and Sītā's Marriage***

*Sarga 73* describes Rām's marriage to Sītā, which illustrates the profound bond between the cardiovascular and nervous systems. This bond ensures the perfect integration of *Purusha* and *Prakṛiti*, silence and dynamism. It also ensures perfection in structure and function, and the fulfilment of all goals and desires.

To be Sītā's lord in a physiological sense is to be lord of the heart and the entire circulatory system, and to control their dynamics. The heart constantly adjusts to different activities, enabling blood to flow to different organs

according to requirement. For example, even when we simply have the thought of running there is an immediate shunting of blood from the digestive tract into the muscles. And when we stop running and sit to eat, the flow of blood is shunted from the muscles to the digestive tract.

Modern imaging techniques clearly display the shunting of blood to distinct parts of the brain whenever we read or speak. For example, if we listen to a symphony, a specific part of our brain is enlivened; if we look at a beautiful landscape, a different part of the brain receives increased blood flow; if we are considering some future activity, the frontal part of the brain is enlivened; and if we are remembering a past event, a part of the temporal lobe is enlivened and more blood flows to that area. We have noted that the supply of oxygen and nutrients comes through the activity of the cardiovascular system, which is the seat of Mother Divine, Sītā. Sītā thus provides a supporting and nourishing influence to every part of the body.

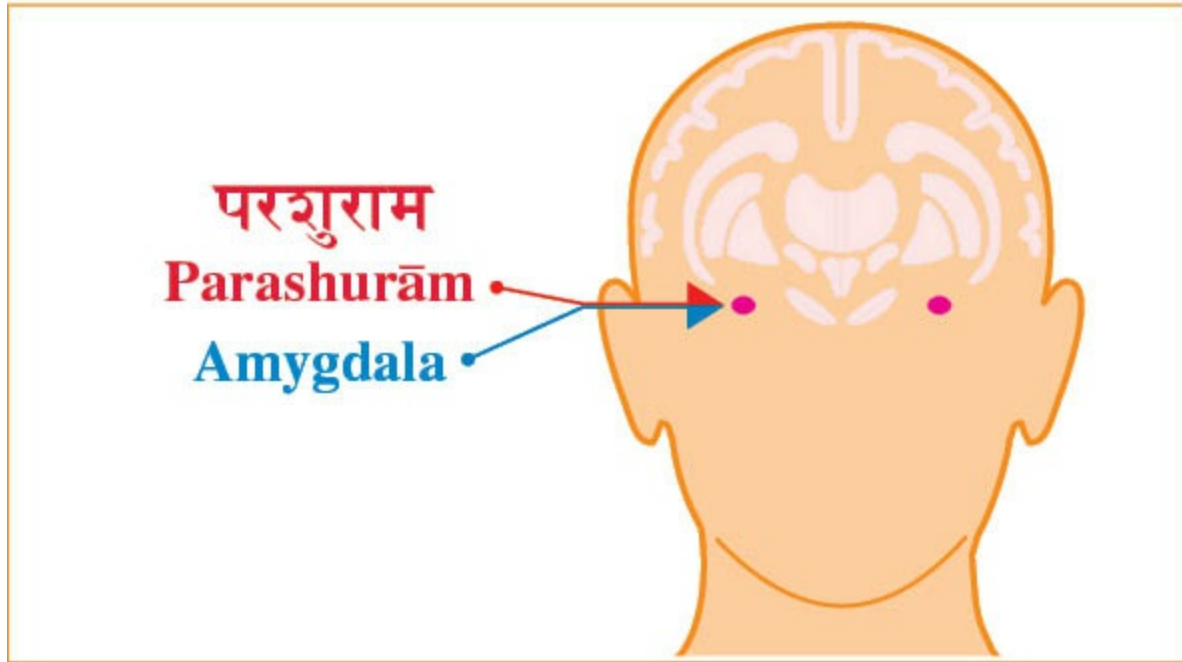
Control of the heart's activity can occur by means of its own internal cycles and rhythm, but an overall modification of the entire cardiovascular system requires the coordinated activity of the nervous system. The heart and cardiovascular system are ultimately controlled from the brain and central nervous system. The marriage of Sītā and Rām represents the integration of the cardiovascular and nervous systems, and it is this important interconnection that maintains the holistic functioning of the physiology.

### ***Sarga 74–77: The Confrontation between Rām and Parashurām***

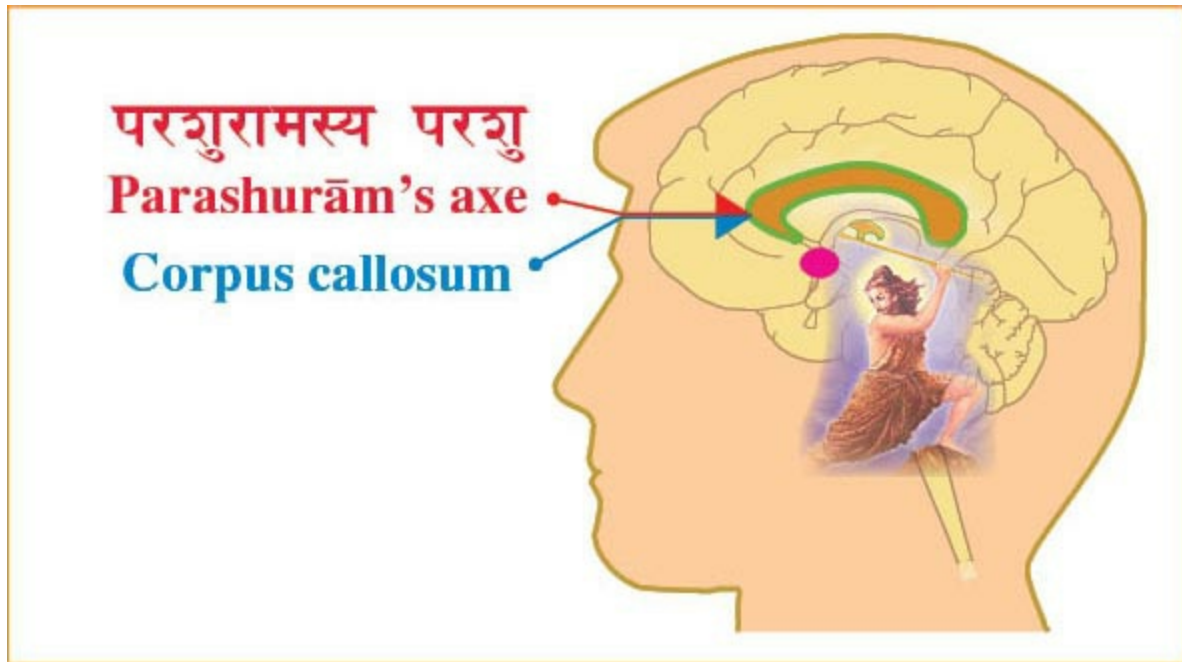
When Shiva's bow split in two, even Parashurām sitting far away was startled, and came quickly to see who dared break it. The final three *sarga* of the *Bāl Kāṇḍ* depict the ensuing confrontation between Rām and Parashurām.

Parashurām is present in the amygdala in the brain, and his axe corresponds to the corpus callosum. The amygdala is a powerful structure of the limbic system that connects the cortex and hypothalamus, creating balance between

them. It is involved in the process of emotional learning. As the sixth incarnation of Vishṇu, Parashurām's role was to destroy the evil *Kshatriyas*, which describes the ability of the amygdala to keep deep animalistic and aggressive instincts under control.<sup>2</sup>



**Figure 10.2** Parashurām, Vishṇu's sixth incarnation, corresponds to the amygdala.



**Figure 10.3 Parashurām's axe corresponds to the corpus callosum.**

The amygdala connects our emotions, including the powerful emotion of anger, to the reasoning and logical parts of the brain. If these connections are not functioning properly, or if the amygdala is out of balance, then one can be overcome with aggression. Parashurām represents the balanced state of the amygdala, which maintains the equilibrium of the *Kshatriya* within us so that we always act in tune with Natural Law and never commit wrong action. The amygdala can also create aggression at the appropriate time, such as when Parashurām destroyed the evil *Kshatriyas*.

The breaking of Shiva's bow corresponds to a huge activation that shakes the entire physiology, which naturally alerts the amygdala. Parashurām came to Rām and challenged him to also string Vishṇu's bow. Rām took the bow from Parashurām and strung it, to which Parashurām replied:

अक्षय्यं मधुहन्तारं जानामि तद्ध्यां सुरेश्वरम्  
धनुषोऽस्य परामर्शात्स्द्धद्यस्ति तेऽस्तु परंतप

*Akshayyam madhu-hantāram jānāmi twām sureshwaram  
dhanusho 'sya parāmarshāt swasti te 'stu Parantapa  
(Bāl Kāṇḍ, 76.17)*

*Because you have strung this bow I recognize you to be the slayer of  
Madhu, the Lord of the Devatās (Vishṇu). May good fortune fall upon  
you.*

In stringing Vishṇu's bow, Rām brought silence and dynamism under his reign. Rām and Parashurām are both incarnations of Vishṇu, but they are different expressions of him. When they met they enjoyed a deep connection, which describes how differences realize that they are indeed one and the same, and melt into Unity. If differences view each other from the perspective of difference alone there can be problems, but if differences recognize each other as expressions of Unity, there is no conflict and harmony prevails.

It is interesting that Parashurām and Rām are both Vishṇu, yet when they first met there was potential conflict. When they recognized each other for their true cosmic status, however, peace reigned. This is how the *Bāl Kāṇḍ* ends, on the triumphant note of the unifying value of Natural Law—with Rām taking Vishṇu's bow and awakening the value of Chakravartī in the physiology. We are now well into our journey of the Rāmāyaṇ, which is a journey of awakening, a journey of understanding how the physiology functions in the holistic unity of silence and dynamism.

### ***Footnotes***

1. See Chapter I, [Sequential Unfoldment of Veda and the Vedic Literature: Maharishi's \*Apaurusheya\*](#)



*Bhāshya* of Ṛk Veda.

2. See Human Physiology: Expression of Veda and the Vedic Literature, pp. 359–361.



# Chapter XI

## *Ayodhyā Kāṇḍ*

### ***Sarga 1–10: Queen Kaikeyī's Boons and the Exile of Rām***

**T**he *Ayodhyā Kāṇḍ* begins in the capital city of Ayodhyā, with King Dasharath expressing his strong desire to place Rām on the throne. It continues through the early period of his exile, ending with his entry into the Daṇḍak forest along with Sītā and Lakshmaṇ.

Before Rām could be crowned, Kaikeyī, the youngest of Dasharath's queens, demanded the fulfilment of two boons Dasharath had promised her many years before. He had promised Kaikeyī that she could have whatever she wished, and so she asked that Rām be exiled to the forest for fourteen years and that her son Bharat be coronated in Rām's place.

Kaikeyī corresponds to the anterior cerebral artery (see [figure 7.9](#) and [figure 11.1](#)), which covers the frontal parts of the brain and curves around the cingulate gyrus. It also encircles the limbic system, which is related to pleasure, emotions, feelings, and anticipation of the future.

Proper brain development requires an adequate supply of blood through the arteries. When any part of the brain is active there is an increase in arterial blood flow to that area. For example, when we read a book certain parts of the brain are activated, such as those involved in vision and in the understanding of words. These include the left temporal lobe and the left parietal area, as well as portions of the occipital lobe. The increased blood flow allows them to support new activity and build new connections.

The creation of new connections is the neurological basis of learning and increased proficiency. The saying 'practice makes perfect' is appropriate in this context because practice promotes increased connectivity between

different areas involved in an action. When we first pick up a musical instrument, such as a flute, we learn where to press and how to hold and move our hands and fingers properly. With time our practice progresses and playing improves, because the pathways between the areas of the brain necessary for playing the flute are increasingly reinforced and become more efficient at conducting impulses between them. New connections also develop, which facilitate better communication between various brain areas, thus improving mind-body and neuro-muscular coordination, and resulting in improved performance. At the same time, the increase in blood flow to the activated areas results in a relative decrease of flow to other areas that are not in use.

This principle enables us to understand the physiological mechanics depicted by Queen Kaikeyī. If we consider Kaikeyī's behaviour from the perspective of an artery in the brain, we see that she feared Rām becoming king because his area of the brain—the somato-sensory and supplementary motor cortex—would become dominant and the flow of blood to this location would increase, while diminishing the flow to the cingulate gyrus and prefrontal area where her son Bharat is located. This might mean that the artery supplying the cingulate gyrus, corresponding to Kaikeyī herself, would diminish in importance or even collapse. This collapse practically never happens under normal circumstances in the brain, because of inherent balancing mechanisms of the nervous system. It is therefore a misguided fear. Kaikeyī's fear for her son and for herself led to her overpowering desire for Rām to be sent away and for her son to be made king. It is as if the artery is saying: 'keep the nourishment passing through me to my area (my son) and remove or diminish the importance of that which threatens to take over and become more predominant (Rām)'.

Kaikeyī was not always dominated by this fear. In fact, when she first heard that Dasharath wanted to coronate Rām she was delighted, exclaiming, 'I do not distinguish between Rām and Bharat. I am therefore pleased that the King will coronate Rām'. It was her servant Mantharā who dissuaded her from her

joy and acceptance of Rām's coronation. Mantharā incited Kaikeyī to request her two boons, urging her to ask for Rām's exile and for the kingdom to be given to Bharat.

Mantharā corresponds to part of the cerebral venous system, which collects waste material such as carbon dioxide from the cells in the brain, and transports it to the next level of larger veins, ultimately arriving at the heart and lungs. The circulatory system consists of both the arterial system, which brings oxygen and other nutrients to the body's cells, and the venous system, which collects carbon dioxide and waste material to be eliminated through the lungs. The venous system also collects toxins and other by-products of metabolism that are eliminated in the liver and kidneys. Thus the venous system acts like a kind of servant, cleaning and removing unwanted material.



**Figure 11.1** The servant Mantharā corresponds to a malformed cerebral vein and Queen Kaikeyī to the anterior cerebral artery.

In Mantharā's imagination, if Rām were to be crowned, Rām's mother—Queen Kausalyā—would become more prominent than Queen Kaikeyī, and Kausalyā's servants would be more prominent than Kaikeyī's. This situation might correspond to a shunting of blood favouring the middle cerebral artery (Kausalyā) over the anterior cerebral artery (Kaikeyī). In this case the amount of blood flowing through the veins associated with the middle cerebral artery would be greater than that flowing through the anterior cerebral vein (Mantharā) associated with the anterior cerebral artery.

Cerebral veins are highly sensitive to any change in the blood supply. A vein that is used will remain intact, but if unused it may collapse. From a vein's perspective, it might become nervous and afraid for its existence, and as a result incite the artery (Kaikeyī) to act in a manner that will increase blood flow to a specific area of the brain such as the brainstem (Dasharath), which controls both blood pressure and blood flow.

As the servant of Kaikeyī, Mantharā's natural place is the anterior cerebral vein. In order to protect her status, however, she expanded her influence to areas in which she was not normally present, such as the veins at the base of the brain, which also cover the area of the middle cerebral artery.

Sometimes malformations develop in cerebral veins, which can appear as a bulging vein or 'hump'. Mantharā is described as hunchbacked, just like such a malformed vein. As a result of Mantharā's attempts to influence Kaikeyī negatively—particularly in a way that is outside her duties as a simple servant—we find the original small malformation becoming larger. Based on genetic conditions and yet unknown contributing factors during early development, even health-threatening malformations can form. The dilation and enlargement of the vein, rapid blood flow, elevated pressure, and the shunting of blood to this area have negative effects for the whole physiology. Furthermore, the abnormal arteriovenous shunting of blood can cause a rush of blood to the heart, leading to high-output congestive heart failure, as in the case of a vein of Galen malformation.

The sequence of events surrounding Mantharā's wicked behaviour reveals the development of these types of physiological problems. Initially, Kaikeyī's request to exile Rām severely depressed King Dasharath. Dasharath is situated in the brainstem, which controls cardiovascular functions, and thus his depression describes the heart function becoming depressed.

Mantharā's move also has implications for Rām's exile, for in that eventuality Sītā (the heart and cardiovascular system) would be exiled as well. Sītā's exile describes a physiological situation in which the circulatory system carries less oxygen to the body, resulting in an accumulation of carbon dioxide. In addition to compromising the functioning of the heart, this leads to further complications in the veins, because a buildup in carbon dioxide causes them to dilate and expand. Imbalance in the cardiovascular system also leads to an unequal flow of blood, resulting in areas of high or low pressure and corresponding dilated or collapsed veins.

### ***Sarga 11: The Origins of Queen Kaikeyī's Boon***

Kaikeyī appears to act on the basis of a negative personality, for she seems selfish, ignorant of Wholeness, and unfair, causing pain to others. However, if we examine the means through which she obtained her boons we will better understand this critical point in the story.

The story describing the origin of Kaikeyī's two boons appears partially in *sarga* 11, but it is also found in other branches of the Vedic Literature, in which we learn the circumstances leading to King Dasharath's promise to her. The first boon was granted after she saved his life when he was severely wounded and unconscious in a battle many years before. The second boon was bestowed later, when she prevented him from being injured or killed while his chariot wheel was falling off.

Dasharath recognized her timely and brave help, and in appreciation he offered her any boon she desired. She decided to save her boons for a later



date, to which Dasharath gladly consented. He was attracted to both her devotion and bravery, and she thus assumed the role of the preferred queen.

We know that Dasharath is located in the midbrain area, an older part of the brain present in all animal species. The midbrain area controls basic vital functions such as heart rate, breathing, blood pressure, and the overall tone of consciousness. The brainstem area, in which the midbrain is located, functions automatically, protecting the body and ruling over it by maintaining these basic functions.

The point at which Kaikeyī requested the fulfilment of her boons corresponds to the moment when the brainstem area becomes connected to the regions that she nourishes, such as the prefrontal cortex, which is involved in planning and anticipation of the future. As the anterior cerebral artery, she therefore plays an important role in the evolution of the brain.

In order to better appreciate the relationship between Dasharath and Kaikeyī, let us further examine her role in the physiology. The anterior cerebral artery arises from the internal carotid artery, and nourishes the anterior part of the brain, including the frontal cortex, the cingulate gyrus, the limbic system, the septal nuclei, and parts of the caudate nucleus and putamen. This region covers a wide variety of structures, including the deep-seated nuclei of the brain, which we have identified as the counterparts of Rāhu and Shani, along with other nuclei that are part of the limbic system.<sup>1</sup>

The limbic system lies above the brainstem, and forms a kind of circular structure in the middle section of the brain. It is involved in emotional behaviour, feelings, and instincts, and is considered to be the seat of the subconscious. Even when we are asleep, old memories stored in this area can activate deep and hidden emotions. The areas supplied by the anterior cerebral artery include the newest parts of the brain, such as the areas in the front and the base of the frontal lobes, which are related to anticipating the future and to balancing emotions with the requirements of the environment. For instance, if the anterior cerebral artery is blocked or clogged, there will

be a loss in one's ability to plan for the future.

Kaikeyī awakened Dasharath by means of the activation of brain structures related to the subconscious. Dasharath lay unconscious on the battlefield the entire night while Kaikeyī protected him, and then she brought him back to consciousness. And at a later time she protected him from falling from his chariot. Kaikeyī nourishes those areas of the brain concerned with subconscious motivations, instincts, and desires. These include the hidden part of the self, which is often associated with negative feelings but which can include positive feelings as well.

It is only natural for a reader to feel upset with Kaikeyī, because she caused Rām and Sītā's exile to the wilderness, where they lived impoverished and exposed to hardships and fierce *Rākshasas*, and their absence brought immense grief and pain to King Dasharath. However, we must remember that Rām was the incarnation of Vishṇu, and came to Earth for the purpose of removing physiological imbalances, which in the Rāmāyaṇ corresponds to the destruction of *Rākshasas*. After Rām progressed through the first stages of maturation, which corresponds to the enlivenment of certain pathways in the brain, he needed to expand his territory of influence and become more than a small king ruling a small kingdom (Kosala). His role was to bring perfect balance to the whole world, to the whole universe—to the entire brain and body. Kaikeyī's role was completely in tune with Natural Law because it ultimately resulted in the establishment of the highest level of health, order, and happiness for the entire universe.

Kaikeyī did not realize this when she demanded Rām's exile, yet without this catalytic event Rām might never have left Ayodhyā. Instead, he might have remained with his family, and as a result Rāvaṇ and the other *Rākshasas* would have continued to disrupt the *Ṛishis' Yagya*.<sup>2</sup> From a subconscious level it was Kaikeyī's action that set the entire story in motion.

The Bhagavad-Gītā very beautifully reveals that the course of action is enormously complex and beyond human comprehension:

## गहना कर्मणो गतिः

*Gahaṇā karmano gatiḥ*  
(*Bhagavad-Gītā*, 4.17)

*Unfathomable is the field of Karma.*

Even though it is impossible to understand all the innumerable factors that cause an individual to make choices and decisions, the effect of a society's collective consciousness is a major influence on our thinking, as is the influence of the cosmic bodies, the planets.

The individual *Karma*, or destiny, of a person can be understood through a branch of the Vedic Literature known as Jyotish, or Vedic Astrology. The human brain contains counterparts of all the planets and the stars,<sup>3</sup> and our *Karma*, which includes all desires as well as the influences of past actions, is imprinted within these structures that collect information and keep track of everything we do. It is as if we were inscribing all our past and present actions into a book.

Ultimately we are our own judge, and we reward and punish ourselves. *As you sow, so shall you reap* perfectly describes this reality. Each of us possesses free will, and the choices we make lead to specific results. Whether in this life or in another, we are accountable for all our thoughts and actions.

One of the most important choices we can make is to learn to transcend, which enables our activity to be increasingly in tune with Natural Law. Each of us can live Wholeness within our physiology, for we all possess the innate ability to strengthen Wholeness—*Rām*, *Brahm*—and to allow that Wholeness to take over our entire physiology and consciousness, so that we can live a mistake-free life in perfection.

Let us review the events leading to Kaikeyī's demand for her boons from the perspective of the evolution of the nervous system. In lower animals, the

nervous system is more primitive and relies upon reflexive action and instincts. In Chapter II we discussed the withdrawal reflex as an example of reflexive behaviour (e.g., one will automatically withdraw a finger that inadvertently touches an open flame). The withdrawal reflex is regulated in the spinal cord: the brain watches and records, and it may feel pain if we do not react quickly enough, but it does not need to be involved in the neural circuit that mediates this automatic reflex. The withdrawal reflex involves three steps: 1) sensory receptors, such as those in the finger, send a message to the neurons in the spinal cord; 2) the information is processed by the spinal neurons; and 3) a message is sent to the muscles to rapidly withdraw the hand.

In addition to the withdrawal reflex, there are other simple reflexes. The stretch reflex provides the automatic regulation of skeletal muscle length. For example, if we lean to one side, certain muscles on that side will stretch. The stretch reflex will cause the muscles on the opposite side to contract in order to compensate for the leaning, and to help maintain balance. This reflex is frequently exhibited during a routine medical examination, when a doctor taps our knee below the patella to stimulate the stretch reflex. In this case, the stretch reflex causes the muscle to contract and the leg to kick involuntarily.

The tendon reflex helps protect the muscles. If there is an increase in muscle tension that might cause damage, the tendon reflex will cause the muscle to relax. These reflexes work together to automatically protect us, and they are especially important in times of danger. For a lower animal, instinctual behaviour may be all that is necessary for survival, whereas a higher animal can hide, attack, and even create a plan.

In any group there is a wide range of types of behaviour, some of which are more reflexive or instinctual, and some that are more refined and comprehensive. Different types of behaviour suggest different levels of brain development: one who displays a more impulsive, animalistic type of behaviour, in which anger and violence arise quickly without due

consideration, will have a corresponding set of connections or pathways in their brain characteristic of a lower level of development. This level of brain development is especially dangerous in a leader of society.

Rām, on the other hand, displays the highest and most refined level of development and behaviour. The Rāmāyaṇ is the story of the evolution of human behaviour and the development of optimal physiological functioning, in which specific connections are reinforced with the effect of unifying all the different areas of the brain. Rām's actions were spontaneously in tune with Natural Law, and even though the basic instinctual and automatic reflexes were still functioning, they were under the control of a more comprehensive and holistic level of administration.

The development of higher parts of our brain, such as the cortex, results in the ability to unfold higher states of consciousness. The stages of development, however, require that the internal, deep brain structures surrender authority to the higher and more newly developed structures in the cerebral cortex. Dasharath's desire to surrender his kingdom to Rām is the expression of the brainstem surrendering to the higher brain centres.

In the *Bāl Kāṇḍ*, Dasharath was described as one of many kings, each the ruler of his own kingdom. However, by the end of the Rāmāyaṇ Rām had become the ruler of the entire world. The transition from many small kings to one global king describes the development of the new brain, in which the higher control areas, in which Rām is present, take control and integrate all the other parts of the brain.

This process occurs over a specific time period, corresponding to the span of the Rāmāyaṇ. This *sarga* represents a point at which these areas have reached a stage of maturity and development that enables them to partially rule the physiology. Complete control is depicted only after Rām completed his exile and returned to rule the entire kingdom. If we follow the story from *Kāṇḍ* to *Kāṇḍ* we see that it corresponds to the stages of brain development.

It is significant that Kaikeyī's request for Rām's exile specifies a period of fourteen years, which is a period that allows the physiology to make the necessary connections with all parts of the brain and physiology. It also enables the higher brain to place those parts of the brain involved with instinct and emotion under its control. This is essential because our sophisticated, yet delicate, physiology must operate within complex social structures. In a social context a human being obviously behaves differently than an animal, and therefore the higher and more conscious levels of the brain must control the lower parts. Such control depends upon the proper connections within the brain, which correspond to Rām's encounters and victories.

In a sense, Kaikeyī's request for Rām's exile is not significantly different from Vishwāmitra's request for Rām to come to the forest to fight *Rākshasas*. Vishwāmitra's request, of course, does not have the hostile overtones of Kaikeyī's demand, but it nonetheless serves a similar purpose.

### ***Sarga 12–15: Rishi Vasishtha's Visit***

These *sarga* begin with Dasharath pleading, even begging, Kaikeyī to withdraw her demand for Rām's exile. The manner in which Kaikeyī insisted gives the impression that she had been overtaken by a stronger force. It is as if she was searching for fulfilment, but in her search she became absorbed in small things and was thus misguided in her behaviour. This can happen to anyone, but we can prevail if we allow Rām to awaken inside us and unfold our enlightenment.

In *sarga* 14 the charioteer Sumantra, who as the interpeduncular nucleus<sup>4</sup> plays an important role in communication, informed Dasharath that Rishi Vasishtha—who had not yet learned of Rām's exile—had arrived for a visit. The news caused Dasharath great distress, and to Sumantra's amazement the King did not immediately attend to Vasishtha. Under normal circumstances, Dasharath would have greeted him immediately and sought his advice, but instead Dasharath sent for Rām. This was unfortunate because Dasharath was



so overwhelmed by the prospect of exiling Rām that he was unable to take advantage of Vasishtha’s advice.

Maharishi has given the knowledge of enlightenment to millions of people, yet there are many more who have not yet taken advantage of it because they are overshadowed by the stress of relative life. As a result, they are oblivious to this precious knowledge. Dasharath also was overwhelmed, in this case by the terms of Kaikeyī’s boons. We can imagine other ways in which the story might have unfolded, but Dasharath was ensnared by destiny, the mechanics of which become more apparent when he explains how his pain and suffering were the result of his own actions.

Maharishi has pointed out that there is no escape from *Karma*, as each choice we make leads to specific results. But it is possible for us to counteract the effects of *Karma* through transcending and through the performance of *Yagya*. Maharishi has explained that in order to reach a destination we can choose to walk, drive, or take an aeroplane and get there quickly—we can practise the Vedic Technologies, which are the fastest and most comfortable way to evolve. This is the beautiful teaching presented in the Rāmāyaṇ—we can live Wholeness in our physiology, for we have the ability to strengthen Wholeness and to allow this Wholeness, which is expressed in the Rāmāyaṇ in terms of Rām (a balanced holistic physiological functioning), to unify and uphold the separate and specific aspects of physiology and consciousness in the most integrated and harmonious way, so that we can live a life of perfection.

### ***Sarga 16–53: Rām’s Exile***

In *sarga* 18 Kaikeyī informed Rām of her demand for his exile. Rām’s decision was to explain the events to his mother Kausalyā, Sītā, and Lakshmaṇ and then honourably fulfil his father’s promise by leaving immediately for the forest. Everyone expressed a strong desire to accompany him, including his father, which is understandable since everyone desires to be with *Brahm*, with Wholeness, with Totality.

Over the course of several discussions, Rām explained that it was not necessary for everyone to come with him, as each had their own destiny. Sītā, however, responded unequivocally that she would accompany her husband and lord into the forest. In this way *Prakṛiti* effectively told *Purusha*, ‘I am you’. Sītā is the embodiment of the total value of *Prakṛiti*, inseparable from *Purusha*. In the end Rām, Sītā, and Lakshman went together to the forest.

In *sarga* 35 Sumantra reminded Kaikeyī of her own mother’s mischief, urging her not to behave similarly. Kaikeyī’s father had received a boon from a *Ṛishi* that allowed him to understand the language of any animal, but he was required to never reveal his ability to anyone. Kaikeyī’s mother heard his laughter and, not understanding its source, thus tried to force him to break his vow, even threatening to leave him. The *Ṛishi* who had bestowed the boon advised him to respect the vow or suffer dire consequences, and taking this advice he held fast. His approach to the wise *Ṛishi* and his constancy with respect to the *Ṛishi*’s advice can be likened to an area of the brain that is receiving proper feedback. Feedback loops insure that the physiology functions in a balanced manner. Many of the stories throughout the Rāmāyaṇ may be incomprehensible on the surface, but their meaning becomes clear when viewed from a physiological perspective.

Despite unpleasant circumstances, Natural Law is always working for our benefit. The entire field of life exists to help us evolve, and when events take place that we do not understand, it is good to pause before becoming upset or angry, for what initially appears to be negative may ultimately create a very evolutionary and positive result. Of course negativity can come to us as the result of the *Karma* we have created in the past, and it may be painful, but the ultimate purpose of *Karma* is not to punish but to correct our direction on the path of evolution.

Maharishi discussed the relationship between *Karma* and the evolution of consciousness in his *Science of Being and Art of Living*, in which he cited the example of an individual making a wrong turn while driving on the highway

and colliding with a guardrail at the side of the road. The guardrail is a protective device to keep drivers on the road, and while hitting it may be painful and distressing, it nonetheless prevents serious injury. Natural Law is our guardrail, always helping to correct and adjust individual actions. We are in the hands of Nature, who is continually helping us and returning us to the fast lane of evolution. The helping hand of Natural Law permeates every aspect of life, and is so perfect and holistic that every individual born on Earth is given the best opportunity for evolution.

Each of us is born under different conditions according to our *Karma*, according to what we have achieved in previous lives, and in this life Natural Law provides the optimal condition for our evolution and growth to higher states of consciousness. This is beautifully exemplified by the stories in the Rāmāyaṇ that describe difficult situations that create pain and distress, but which provide the means to bring about a perfect society in Ayodhyā.

The loving emotions and appreciation that Dasharath felt for Kaikeyī prompted him to grant her the boons. This is consistent physiologically, because the parts of the brain that Kaikeyī nourishes include structures underlying the expression of emotions. When these areas are out of balance they can make us irrational, and seemingly out of tune with what is appropriate and good. Rām, as the embodiment of compassion, understanding, and patience, advised everyone to be kind to Kaikeyī and not treat her badly. This is due to his loving nature, and because he always maintained the vision of the whole.

Of course when the time for battle was at hand, Rām was firm and strong. He did not focus on the weaknesses of others, but only on their strengths and goodness. Rām had his own destiny to fulfil, which was to bring everything back to himself, to Wholeness, and to create an ideal kingdom for all mankind.

In *sarga* 40, Rām, Lakshmaṇ and Sītā circumambulated Dasharath clockwise before departing for the forest. Much of Ayodhyā's population followed them

out of the city, but they were finally able to separate themselves from the citizens while everyone was sleeping. Upon reaching the banks of the river Gangā, Rām once again tried to convince Lakshmaṇ to return and take care of their father and their mothers, but Lakshmaṇ insisted on staying with him and Sītā.

This passage, in which Rām first circled his father and then proceeded to Gangā and subsequently to the forest, describes the development of connections by the somato-sensory and supplementary motor cortex on its path to establish control over all parts of the physiology. It first creates a connection with the midbrain (Dasharath), and then establishes connections with structures in the area of the central canal<sup>5</sup> where the cerebrospinal fluid flows (Gangā). Finally it creates a connection with the inner part of the brainstem, the reticular formation, which has the appearance of a dense forest of neurons branching in all directions.

### ***Sarga 54–56: The Meeting with Ṛishi Bharadwāja***

Rām, Sītā, and Lakshmaṇ arrived at Ṛishi Bharadwāja's *Āshram* at the confluence of the Gangā and Yamunā rivers. Bharadwāja welcomed them and invited them to stay indefinitely, but Rām could not accept because he felt that their proximity to Ayodhyā would encourage the citizens to come to see him, disrupting the *Āshram*'s peace. Bharadwāja recommended that they continue to Chitrakūt, and so the three departed and soon arrived at Vālmīki's *Āshram*.

Rām instructed Lakshmaṇ to build them a hut, and then propitiated the *Devatās* presiding over it, performing a *Vāstu Shānti* ceremony according to tradition. At this point Rām had adopted the forest as his home, and had begun a new phase of life. It is significant that this took place in Vālmīki's territory, because we know that Vālmīki is the seer of the Rāmāyaṇ, and therefore his consciousness must play a critical role in the transformation of

Rām's life.

Vālmīki and the other *Ṛishis* encountered by Rām are located in the same general area, which corresponds to the position of the nuclei in the brainstem. In Chapter XVII we will consider the relationships between Rām and the *Ṛishis* in great detail. We will also examine the physiological significance of the advice that each *Ṛishi* gave, and see how Rām paid them constant homage and continually took their instruction.

The *Ṛishis* were aware of the activities of the forest, including who entered and departed, and advised Rām accordingly. This corresponds to the communication networks between the nuclei and other structures in the brain, which involve feedback loops that help organize and integrate various physiological functions. Later we will see that the *Ṛishis* informed Rām of the *Rākshasas*' locations, and gave him special weapons, or *Astras*, to help defeat them.

Rām is beginning to take over the entire physiology precisely and sequentially, moving from one location to another. We can follow Rām's path in our brain, which reveals the beautiful unfoldment of the total potential of Natural Law. Rām enlivens the entire body so that every part is in perfect tune with Unity, with the great, grand wholeness of life. This is the essence of the Rāmāyaṇ.

### ***Sarga 57–68: Dasharath's Story***

Rām sent Sumantra back to Ayodhyā with the chariot to assure Kaikeyī that he was indeed living in the forest, and that he would not return. Sumantra arrived at the palace and delivered Rām's message to Dasharath and his family.

In *sarga* 62 and 63 Dasharath recounted the story of his accidental killing of a hermit boy many years before, who had been the support of his blind parents. While hunting he had entered the forest and shot an arrow that

unintentionally struck and killed the boy. The parents were completely dependent on their son, and in the father's words, 'You are our support as we are helpless; you are our eyes, as we are without eyes. Our very breath is dependent on you'.

As a result of killing the boy, Dasharath was destined to suffer a fate similar to the parents'—just as they had endured the loss of their son, Dasharath would also undergo the loss of his son:

पुत्रव्यसनजं दुःखं यदेतन्मम साम्प्रतम्  
एद्धृद्यं तद्धृद्यं पुत्रशोकेन राजन्कालं करिष्यसि

*Putra-vyasanajam duḥkham yad etan mama sāmpratam  
evam twam putra-shokena rājan kālam karishyasi  
(Ayodhyā Kāṇḍ, 64.54)*

*Since I am experiencing this misery from the death of my son, you will  
thus come to your end, O King, through sorrow from the (loss of your)  
son.*

Dasharath's punishment was to be forced to exile Rām and suffer separation from him. This separation caused the king immeasurable pain, and shortly after telling the story Dasharath passed away, leaving his body and ascending to Heaven.

Both Dasharath's pain and death correspond to specific features and stages of the brain's development. In many animals the brainstem and midbrain are important areas for processing and relaying sensory input to the higher brain, but in human beings the sensory input for vision bypasses the midbrain and goes directly from the eyes to the thalamus, located in the brain's centre. The death of the hermits' son, who acted as his parents' eyes, represents the loss or separation of the visual processing from the midbrain area that occurs with the brain's evolution.



Dasharath's death also reveals the brain's evolution, symbolizing the shifting of control of physiological functions from the brainstem to higher levels of cortical control, where Rām is located. We cannot say that the brainstem area dies, of course, because this area is essential to life, and indeed Dasharath reappears at the end of the story and is reunited with Rām. Natural Law is always victorious—it always progresses to a higher, more holistic reality, a principle that is beautifully brought out in the Muṇḍaka Upanishad, which says:

सत्यमेव जयते

*Satyam eva jayate*

*(Muṇḍaka Upanishad, 3.1.6)*

*Truth always triumphs.*

### ***Sarga 69–116: Rām's Meeting With His Brother Bharat***

Following Dasharath's death, Vasishtha immediately sent messengers to Rām's brothers Bharat and Shatrughna, requesting their return from the kingdom of Kekaya where they had been visiting. He instructed the messengers not to speak of either Rām's exile or Dasharath's death. It is interesting to see the difference between Rām and Lakshmaṇ's path and that of Bharat and Shatrughna. Rām and Lakshmaṇ went to the forest and battled many *Rākshasas*, while Bharat and Shatrughna peacefully administered Ayodhyā in Rām's absence.

Before Bharat returned to Ayodhyā, he had a number of premonitions, dreams, and feelings, which he was unable to understand. These were based on Rām and Sītā's exile and the death of his father. In this we see the correlation between the details of the story and the area of the brain to which Bharat corresponds, namely the frontal cortex, the cingulate gyrus, and limbic system. These areas are responsible for deep unconscious thoughts and the

anticipation of future events, so they could well support the experience of dreams and premonitions of the future.

The brain develops in distinct stages at different time periods. A child first gains mastery over motor function and balance, only later beginning to wonder who he is and what his role in life should be. This is the period of the development of the prefrontal cortex, where Bharat and Kaikeyī are located. During this same time period Rām's area of the brain begins to acquire control over the field of action.

When Bharat returned to Ayodhyā, he learned of Rām's exile from his mother Kaikeyī and became angry with her. He would not accept the throne, even though Vasishtha and the other *Ṛishis* insisted that it was dangerous for the kingdom to remain without a king. His response was that Rām was the rightful king, and must return from exile.

Bharat then performed the proper ceremony for Dasharath's departure to Heaven. Immediately afterwards he set out to find Rām, accompanied by a large group of family, courtiers, and citizens. His deep desire was to ask Rām to return to Ayodhyā as king. When they arrived in Chitrakūt, however, Rām strongly declared his intent to fulfil his father's promise and live in the forest for the required fourteen years.

Vasishtha and the three queens then met with the four brothers. Rām told them not to mourn Dasharath's death, in part because death is inevitable for all living beings but also because Dasharath was, in fact, immortal and infinite.

The next few *sarga* describe how the mothers, the *Ṛishis*, and of course Bharat tried with great effort to persuade Rām to return to Ayodhyā. Rām, however, reiterated his intent to remain in the forest and his desire for Bharat to rule in his place. Rām's attention on them while they pleaded for his return describes the development of neural connections in a feedback loop between Rām and their areas of the physiology. This is how the brain works—by

developing communication channels between different areas through the creation of feedback loops, so that the control of each area can be finely adjusted according to need.

The process of creating connections and feedback loops between various isolated areas is an integral part of the unfoldment of Natural Law, which maintains all of the mechanisms of evolution and development. Veda and the Vedic Literature is structured in loops, with each loop containing six branches of Vedic Literature.<sup>6</sup> In each loop, three of the branches unfold the steps of expansion, while the other three maintain the connection with their source in the Unified Field of Natural Law. The quality of expansion is expressed in the branch of Vedic Literature known as Vyākaraṇ, while the self-referral quality, which maintains the connection with the source, is expressed in Nirukt.

Maharishi explains that these feedback loops are like circles within circles, and indeed we see this description in the structure of the Rāmāyaṇ. Rām departed from Ayodhyā and journeyed for fourteen years before making his triumphant return. This is one full circle, or feedback loop. Within this large circle there are smaller feedback loops. For example, when Rām travelled into the forest, his family begged him to return to Ayodhyā—Rām was both propelled forward by the force of evolution and pulled back by the fullness of the Self. This is an example of a loop within a loop. Maharishi has brought to light how feedback loops are found within the Vedic Literature, and indeed everywhere in creation. They serve as an internal mechanism for creating Wholeness in the Vedic Literature, and as a mechanism for creating adaptability and balance in various physiological functions.

Bharat insisted again and again that Rām return to rule Ayodhyā. Even Vasishtha tried to convince him to return. Everyone expressed their deep, shared feeling that there could be no fullness without Rām. Thus Rām began to move in one direction, but everyone tried to pull him back because they all wanted to be close to him, and in this way he was constantly pulled from the

manifest back to the unmanifest, from the specific to wholeness, and from wholeness to the specific. Expansion and retraction is a continuous reality, and Maharishi has pointed out that when we continue to go forward, the return can become even more powerful. In these *sarga* we see the growth of the intimate connection between Bharat and Rām, between Rām and the whole kingdom. Even though Rām and Bharat are one and the same, Bharat's desire to not be separate from Rām is a statement that he does not want their oneness, their wholeness, divided into pieces. Similarly, the result of this back and forth activity in the physiology is that it establishes a stronger connection between two areas.

Bharat returned to Ayodhyā and placed Rām's sandals on the throne, and began to practise long meditations, saying in effect, 'I will administer, he (Rām) is the ruler'. Bharat transcended his separation from Rām, and went deep into his own self-referral consciousness, which is Rām's consciousness. Putting the sandals on the throne signified that Rām was the true ruler of Ayodhyā, which indicates that the prefrontal area and cingulate gyrus, to which Bharat corresponds, are engaged in the process of transcending.

This passage also describes an important stage in an individual's development. The technique of successful action is to first identify one's desires, goals, and plans, and then return to the Self. This is precisely what Bharat did—he closed his eyes and went into deep meditation. In this way, the prefrontal area (Bharat)—which is involved in anticipation and planning for the future—undergoes a further stage in its education and development.

This corresponds to a level of brain maturation in which an individual is gaining control of his physiology and becoming master of his destiny. This is achieved through *Tapas*, going back to the Self. Bharat was in effect saying that he would find his future within himself, and by going within he allowed Rām, the ruler of the universe, to administer Ayodhyā. This is the ideal of administration, which can be applied in any time and in any place. By identifying his awareness with Cosmic Intelligence—Rām, *Brahm*—a ruler

can bring the total potential of Natural Law to his own awareness, and thus to the administration of the nation.

During this period of physiological growth and evolution, all hopes and thoughts of the future must be in tune with the inner Self, with Rām, with Totality. This is a key principle in education: discover the power within and Nature will support all action. Everything good will come in a natural way, for the infinite organizing power of Natural Law becomes life's guiding force. This principle is beautifully expressed in the following verse from Rk Veda:

यतीनद्धत्वां ब्रह्मा भद्धद्धद्यति सारद्धद्धथिः

*Yatīnām Brahmā bhavati sārathiḥ*  
(Rk Veda, 1.158.6)

*For those established in self-referral consciousness, the infinite organizing power of the Creator becomes the charioteer of all action.*

The realization of the inner Self is gained easily and naturally through the practical programmes of Maharishi's Vedic Science—the Transcendental Meditation and TM-Sidhi programme, including Yogic Flying. These programmes spontaneously bring life in accord with Natural Law.

The beautiful ending of this *Kāṇḍ* brings a reconciliation in which all the differences have collapsed and surrendered into Rām. The surrender is particularly clear in the case of Bharat, who consented to return to Ayodhyā with the condition that if Rām did not return in fourteen years he would throw himself into a fire and immolate himself. He was thus indicating that relative existence is worth nothing without Rām—without Wholeness, without *Brahm*, there is no life in the relative.

Bharat reconciled himself to the fourteen years of Rām's exile. However, once this period was completed his deepest need was to be one with Wholeness, with Rām. If we interpret this in terms of physiological development, it is as if we say that we want to be enlightened when we reach adulthood, for nothing else is worthwhile.

The attitude of complete surrender hastens the process of gaining enlightenment. It is our birthright to be enlightened, to know Veda, to realize that the cosmos is lively within our own physiology, but it is only through the process of total brain development that enlightenment and fulfilment can be gained.

### ***Sarga 117–119: The Meeting with Ṛishi Atri***

In the last few *sarga* of the *Ayodhyā Kāṇḍ*, Rām met with the great Ṛishi Atri, a son of Brahmā and one of the *Sapta Ṛishis*. We have located him as one of the seven columns of the brainstem, in the special somatic sensory tract responsible for hearing, vision, and balance (see [figure 17.33](#)). This tract includes the cochlear and vestibular nuclei.

Vishwāmitra is a descendant of Atri, which is consistent with our analysis of Vishwāmitra as the vestibular system. Having paid homage to Atri, Rām was ready to begin his next responsibility as the protector of the *Ṛishis*.

### ***Footnotes***

1. See Human Physiology: Expression of Veda and the Vedic Literature, pp. 116–121.

2. In English, most nouns form their plural by adding a final 's', but this is not the case in Sanskrit. In order to maintain the integrity of the Sanskrit sounds, therefore, we have in most cases not added the English 's' to indicate the plural of a Sanskrit noun. Although this means that the singular and plural forms often appear identical, the distinction should be clear from the context. In a few cases (such as *Ṛishis*, *Devatās*, and *Rākshasas*), we have included a final 's' to avoid confusion.



3. See Human Physiology: Expression of Veda and the Vedic Literature, pp. 116–129.
4. See Chapter VII, [The \*Yagya\* for Rām's Birth](#).
5. Connections can be indirect, via relay stations that are either close to or far from the structures being connected.
6. See Human Physiology: Expression of Veda and the Vedic Literature, Chapter VII.



## Chapter XII

### *Āraṇya Kāṇḍ*

#### ***Sarga 1–4: Rām’s Encounter with Virādha***

*Āraṇya* means ‘forest’, and the *Āraṇya Kāṇḍ* begins with Rām’s entry into the Daṇḍak forest. When he first entered, Rām was welcomed by a group of *Ṛishis* who honoured him and asked for his protection. These sages represent the nuclei within the reticular formation. There are many nuclei in this area, a number of which are involved with the maintenance of states of consciousness such as wakefulness, dreaming, and sleep. In addition to their connection to the modulations of consciousness, the *Ṛishis* also correspond to specific tracts within the brainstem involved in the integration of sensory and motor functions, which ensure that all action is in harmony with Natural Law.

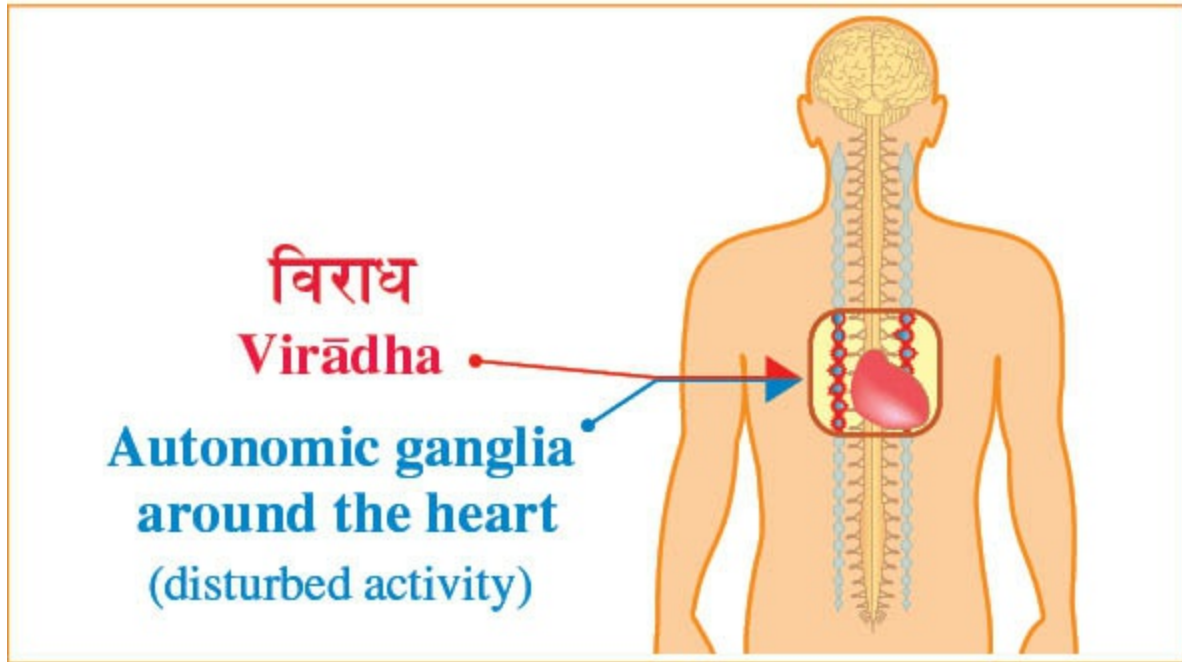
The *Ṛishis* had been continually disturbed by *Rākshasas*, and were asking Rām for his protection. *Rākshasas*, as we have seen, are imbalances or negative forces that influence the physiology’s activities. They can manifest as disease or as some type of abnormal functioning of an organ or tissue. We will examine *Rākshasas* in greater detail when we reach the story of Rāvaṇ.

As Rām went deeper into the forest with Sītā and Lakshmaṇ, he encountered an enormous *Rākshasa* named Virādha. Virādha grabbed Sītā causing her to tremble with fear, and told Rām and Lakshmaṇ that he was going to kill them both and marry Sītā. Rām was enraged, but Virādha showed no fear because he had received a boon from Brahmā guaranteeing that weapons could never kill him. Nevertheless Rām shot him with seven arrows, resulting in Sītā’s release. Virādha then rushed toward Rām and Lakshmaṇ, who countered with their swords, but in the course of the combat Virādha drew them deeper into the forest. Finally they managed to cut off his limbs causing him to bleed profusely, but still he did not die. At this point Virādha realized that he had been fighting with Lord Rām, and begged forgiveness. Virādha explained

that he had formerly been a *Gandharva* by the name of Tumburu, who was cursed by his lord, Kuber, to assume this terrible form until Rām finally defeated and liberated him.

Virādha represents a part of the autonomic nervous system. The branch of the Vedic Literature known as Gandharva Veda is identified as the autonomic ganglia surrounding the heart.<sup>1</sup> The autonomic ganglia modulate the activity of the heart through sympathetic and parasympathetic inputs, and are able to either increase or decrease the heart rate. In frightening Sītā (the heart), Virādha significantly affected the heart rate. The fight between Virādha, Rām, and Lakshmaṇ represents the central nervous system reclaiming protection and supervision of the heart.

The autonomic nervous system functions automatically, often independently from any higher level of control in the brain. For example, the sympathetic branch of the autonomic nervous system is activated when we run, causing an increase in heart rate and blood flow to the muscles and heart. This automation in administration frees us from worrying about every required change. Such control is important, but it must be in tune with the holistic requirements of the nervous system rather than solely based on the needs of the autonomic nervous system. If the autonomic nervous system becomes disconnected from the brain, there may be unexpected changes that do not take the holistic requirements of the body into consideration. Many diseases, such as digestive problems or irregular heartbeats, are due to imbalances in the autonomic nervous system.



**Figure 12.1 Virādha, a *Rākshasa*, corresponds to the disturbed activity of the autonomic ganglia around the heart.**

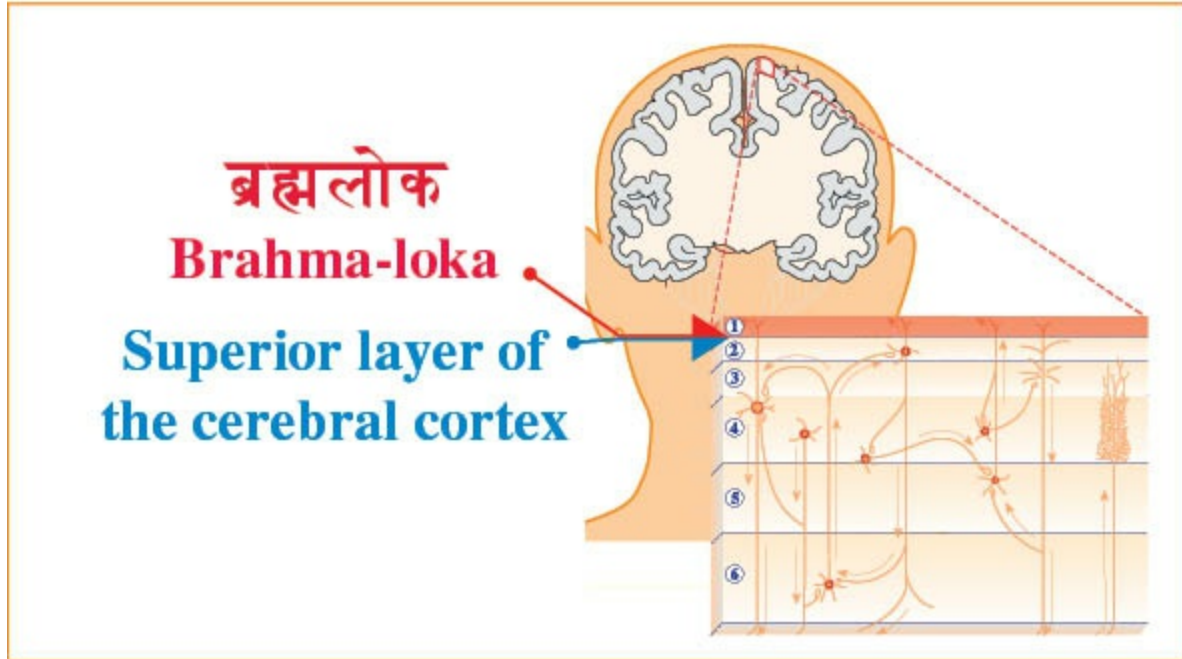
The story of Virādha describes an attempt of the autonomic nervous system to take control of the cardiovascular system. Such an action would create a state of imbalance, so it was necessary for Rām to subdue Virādha and regain control of the heart. Virādha wanted to die so that his curse would be removed, but since weapons could not kill him, Rām buried him in order to finally destroy him. This describes how the central nervous system takes control by placing the functioning of the autonomic nervous system on an unconscious level. Rām, as the holistic functioning of the physiology, regains control of the heart from the autonomic nervous system, thus returning the physiology to proper order.

Virādha tried to seize Sītā because he had been a *Gandharva*, with the cardiovascular system as his area of activity. When total law presented itself in the form of Rām, Virādha was forced to surrender his control and was relegated to his natural home in the unconscious. This story introduces us to

an important aspect in the development of the physiology as it is taken over by Rām, who is gaining greater command over different areas. He had previously taken control of parts of the physiology associated with Tātakā and her sons, and in this *sarga* he assumes control of those associated with Virādha. We have moved from the vestibular system to part of the autonomic nervous system controlling the heart, and we see how wholeness is beginning to take all the different parts of the body under its holistic control.

### ***Sarga 5–10: Rām’s Visit to Ṛishi Sharabhanga***

On Virādha’s advice, Rām, Sītā, and Lakshmaṇ went to visit Ṛishi Sharabhanga and saw him for the first time as he was conversing with Indra, the lord of the *Devatās*. Sharabhanga spoke with them briefly, suggesting that they visit Ṛishi Sutīkshṇa. He then entered a fire in order to ascend to *Brahma-loka*, which corresponds to the superior layers of the cerebral cortex, the highest level of cognitive functioning. Sharabhanga had been waiting for Rām, and when he finally arrived the Ṛishi surrendered to him completely. Sharabhanga corresponds to the central reticular group of the medulla, which consists of the ventricular reticular and the gigantocellular nucleus of the medulla. We will discuss this correspondence in more detail later,<sup>2</sup> but his submission to Rām marks the surrender of another individual part of the body to the holistic administration of the nervous system.



**Figure 12.2** *Brahma-loka* corresponds to the superior layer of the cerebral cortex.

A group of *Ṛishis* gathered at Sharabhanga's *Āshram* asked Rām to defend them from the *Rākshasas*. He assured them of his full protection before again setting forth with Sītā and Lakshmaṇ, this time for Sūtīkshṇa's *Āshram*. On their journey Sītā asked Rām why the killing of *Rākshasas* without enmity did not violate the principle of *Ahimsā* (non-violence). Rām responded that it is the *Dharma* of the *Kshatriya* to subdue oppressors and to protect Natural Law from imbalance, adding that destroying *Rākshasas* is necessary for the *Ṛishis*' protection.

This conversation provides an example of *Prakṛiti*, the essence of the creative and protective power, inquiring about the value of destruction. It is as if dynamism enquires of silence whether it is good to bring silence to living beings, and silence responds that without silence the *Ṛishis*, the universe, and the whole of Natural Law would be disturbed.

Maharishi has described the interaction between silence and dynamism as a mutual fear of annihilation that leads to alertness. Rām's explanation of the



need for destroying *Rākshasas* essentially explains that without restoring silence to activity, without perfect harmony, dynamism can disturb Natural Law. ‘*Rākshasa*’ in this case can be defined as activity that is totally devoid of silence, and when Rām destroys *Rākshasas* he is providing them with silence.

Rām is *Brahm*, the Wholeness that includes both silence and dynamism. When *Prakṛiti* enquired about this apparent dichotomy, Rām pointed out that dynamism, or any activity devoid of silence, is a threat to the *Ṛishis*. The *Ṛishis* represent evolution and balance, and the Rāmāyaṇ here reveals a very beautiful unfoldment of the reality of Natural Law. With Rām’s explanation, we understand that anyone devoid of silence has some component of the *Rākshasic* nature, and is therefore not acting in tune with Wholeness. In the same way, any part of the body that is not connected with Rām is in a sense functioning abnormally, because it is not truly connected with the whole. That is what Rām accomplishes when he brings silence to the *Rākshasas*.

This analysis does not suggest that Rām approved of killing. Rām brought silence to the *Rākshasas*’ non-silent and disorderly dynamism. Dynamism and activity are both beautiful when they are in harmony. Lacking silence and harmony they are noise and chaos. The *Rākshasas* in this context represent a kind of ‘noise’ in the brain, an abnormal activity, and Rām’s harmonizing action immediately brings them back to proper attunement with the whole physiology.

### ***Sarga 11–13: Rām’s Meeting with Ṛishi Agastya***

After about ten years of visiting various *Āshram* throughout the Daṇḍak forest, Rām, Sītā, and Lakshmaṇ approached the *Āshram* of the great Ṛishi Agastya. The Vedic Literature describes how Agastya, an ocean of spiritual merit and power, purified and protected the world from imbalances. In one instance he purified water by drinking the ocean dry to expose the *Rākshasas* lying at the bottom, and in another he removed a mountain that had become too high and was obstructing the Sun’s rays.

These descriptions can easily be understood in the context of Agastya's role as the inferior olivary nucleus. The olivary nucleus is situated in the brain in the area of the pons and medulla. Its resemblance to an olive gives rise to its scientific name. The olivary nucleus has broad connections in the nervous system, but its main function relates to the cerebellum.

Cerebellum means 'small brain', and indeed it looks like a small brain sitting on the back of the rest of the brain. The cerebellum receives input from virtually every type of receptor, and coordinates motor function, regulating both muscle tone and the maintenance of motor equilibrium. The inferior olivary nucleus works with the cerebellum as part of the olivo-cerebellar system, which is mainly involved in cerebellar motor-learning and function. In addition, studies have shown that the olivary nucleus participates in sensory modulation and can have an integrating influence on different levels of the nervous system. For example, if there is an overflow of sensory or motor activity that might lead to an imbalance of motor function, the olivary nucleus, along with the cerebellum, participates in integrating these influences and balancing them so that there is no excess motion or obstruction that could cause problems.

Inputs come to the physiology through all the senses, and a large number of outputs extend to the motor system and muscles. This may seem like a simple equation, but many types of complex microscopic activities are taking place at every moment, all of which must occur harmoniously. The olivary nucleus selects, purifies, absorbs, and integrates all these activities. When Rishi Agastya drank the ocean dry, it was to distinguish the important activities from the unmanageable mixture that existed before, and when he removed the mountain so that it no longer obstructed the Sun's rays, he was unblocking what needed to emerge.

The Sun corresponds to the thalamus, and we repeatedly see that all the activities of the sensory systems are related to the thalamus—to the rays of the Sun and the quality of wakefulness. Rishi Agastya plays a crucial role in

allowing the Sun's rays to be absorbed by removing an unnecessary obstacle, and we will see later that Sūrya, the Sun, gave Rām vital advice during his battle with Rāvaṇ while also providing him with Viṣṇu's divine bow.

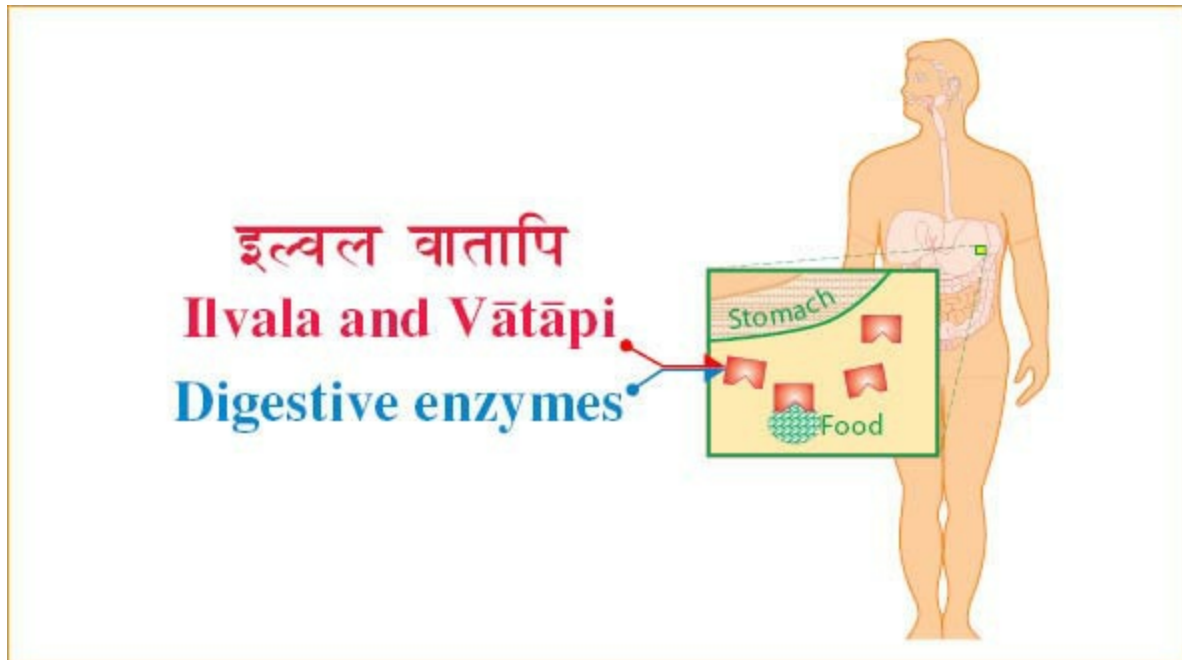
### ***Sarga 11: The Story of Vātāpi and Ilvala***

*Sarga 11* relates the story of two *Rākshasas* named Vātāpi and Ilvala, the sons of Surasā. Surasā corresponds to the splenic artery, which sends its branches to the spleen as well as to the digestive tract and the stomach.<sup>3</sup>

Ilvala had been assuming the form of a *Brāhmaṇa*, speaking in Sanskrit and inviting local *Brāhmaṇas* to dine with him. His brother Vātāpi would take the form of a ram and allow himself to be cooked and fed to a *Brāhmaṇa*. After dinner Ilvala would cry loudly, 'Vātāpi, come out!' Hearing his brother, Vātāpi would then emerge, tearing apart the body of the *Brāhmaṇa*. In this way the brothers killed thousands of *Brāhmaṇas* over time.

Vātāpi and Ilvala attempted the same trick on Agastya, who also ate the cooked meal. But when Ilvala cried to his brother, 'Come out!' Vātāpi did not appear. Agastya laughingly told Ilvala that he had already digested him. Ilvala was enraged and attacked Agastya, but was immediately annihilated by Agastya's fiery glance.

Agastya's digestion of Vātāpi corresponds to the role of enzymes in maintaining digestive balance. The study of nutrition teaches that enzymes are necessary for digestion, but if one does not eat, these same enzymes will digest the body. Ilvala and Vātāpi correspond to digestive enzymes that are out of balance. If we understand how to keep our enzymes balanced, like Agastya, we will digest them rather than allowing them to digest us.



**Figure 12.3** The *Rākshasas* Ilvala and Vātāpi correspond to digestive enzymes.

On the cellular level, the story corresponds to a purification process that takes place in the synapse between neurons. When one neuron interacts with another it does so across the synaptic gap.<sup>4</sup> The first neuron releases a neurotransmitter that crosses the synaptic gap to deliver its molecular message to receptors in the membrane of a second neuron, the postsynaptic membrane. The neurotransmitters fit into the receptors and cause the second neuron to be activated. The second neuron may be activated in the same manner as the first, or it may have its own separate, modulated level of activity according to its requirements. The neurotransmitters are like Vātāpi—they are as if swallowed, or taken in by the receptors on the receiving neuron.

Agastya swallowed Vātāpi and transformed him rather than allowing himself to be transformed, which corresponds to the second neuron taking up the neurotransmitter and behaving differently. This correlates with the nature of the powerful integrating neurons present in the area of the brain where Agastya is located. These neurons metabolize the neurotransmitters and then

behave differently, producing the most appropriate activity. In other parts of the brain, there are thousands of neurons that respond by passing information and behaving in the same manner as the neuron that passed information to them. These neurons are like the thousands of *Brāhmaṇas* who were eaten by Vātāpi. This description of the functioning of Natural Law reveals the hierarchy of neural activity, in which Agastya represents the most powerful type of neuron.

We have seen this correlation with Agastya on the level of the digestive tract and on the level of the neurons, and we can also see that the relationship of the *Brāhmaṇas* and Agastya is like that of the relative and Absolute. In their state of ignorance, the *Brāhmaṇas* ate what was presented to them, and what they ate digested them. When the enlightened Agastya ate, he metabolized what he consumed. Naturally no one would want to be in the position of the *Brāhmaṇas*—we would prefer to be like Agastya and digest our experiences rather than being overwhelmed and as if devoured by them.

Maharishi explains that when we look at a flower, our awareness becomes identified with the flower—all that remains in the awareness is the flower. It is as if cosmic reality is overshadowed and there is only an individual who for that moment has become the flower. The reality of our true Self, our cosmic Being, is completely overshadowed by what we see, a simple flower. This is the story of Ilvala and Vātāpi. This is the reality lived by most people in the world, who are symbolically being digested by *Rākshasic* activity—they become overshadowed by every experience, and the Self is lost. Only those who enjoy higher states of consciousness are capable of acting on Agastya's level, in which the Self remains always as the non-changing reality underlying every experience. In higher states of consciousness, we are able to take in information and digest it rather than being digested by it.

In Chapter I we examined Maharishi's description of Veda as sound and silence.<sup>5</sup> Unfortunately, in our modern age only the value of sound is considered, in the sense that scholars translate the verses and become lost in

the meaning, completely neglecting the significance of the silence between the sounds. In this case the sound itself overshadows silence. Sound and its meaning are important, but silence is the ultimate basis of all dynamism.

Vātāpi, who represents imbalanced dynamism, was entirely absorbed by the silence of Agastya, and fully integrated within him. Ilvala, who remained, became angry, which means that he expressed dynamism without peace. Just one look from Agastya was enough to annihilate him—Agastya brought the *Rākshasa* back to silence. Rām employed this same principle again and again when he overcame different *Rākshasas*, bringing them back to silence.

The story of Ilvala and Vātāpi provides us with an example of how the characters and events of the Rāmāyaṇ reveal different levels of Natural Law, from the gross level of the structure and function of the nervous and digestive systems to the most subtle, unmanifest dynamics of creation.

### ***Sarga 14: The Meeting Between Rām and Jatāyu***

While travelling through the forest, Rām met Jatāyu, an immense and aged eagle who had been a friend of Dasharath. Jatāyu and his older brother Sampāti were the sons of Aruṇa, the charioteer of Sūrya (the Sun) and the brother of Garuda, whom we will discuss in Chapter XX. Jatāyu offered his companionship to Rām, and promised to guard Sītā when Rām and Lakshmaṇ were not with her. Jatāyu also described the genealogy of the birds, animals, and other beings, which we will discuss in detail in Chapters XX and XXI.

Birds are often described as carriers in the Vedic Literature. Garuda, for example, conveys Viṣṇu wherever he goes. Jatāyu and his brother Sampāti correspond to the two main types of carrier proteins: circulating carrier proteins and fixed carrier proteins. Circulating carrier proteins are molecules that circulate in the blood and transport different molecules, and are one of the first transport systems used by primitive as well as phylogenetically newer organisms. These correspond to Jatāyu, who is able to fly and is



among the eldest of the birds. Jatāyu is described as ‘ancient’, and phylogenetically the circulating carrier proteins are ancient with respect to living systems.

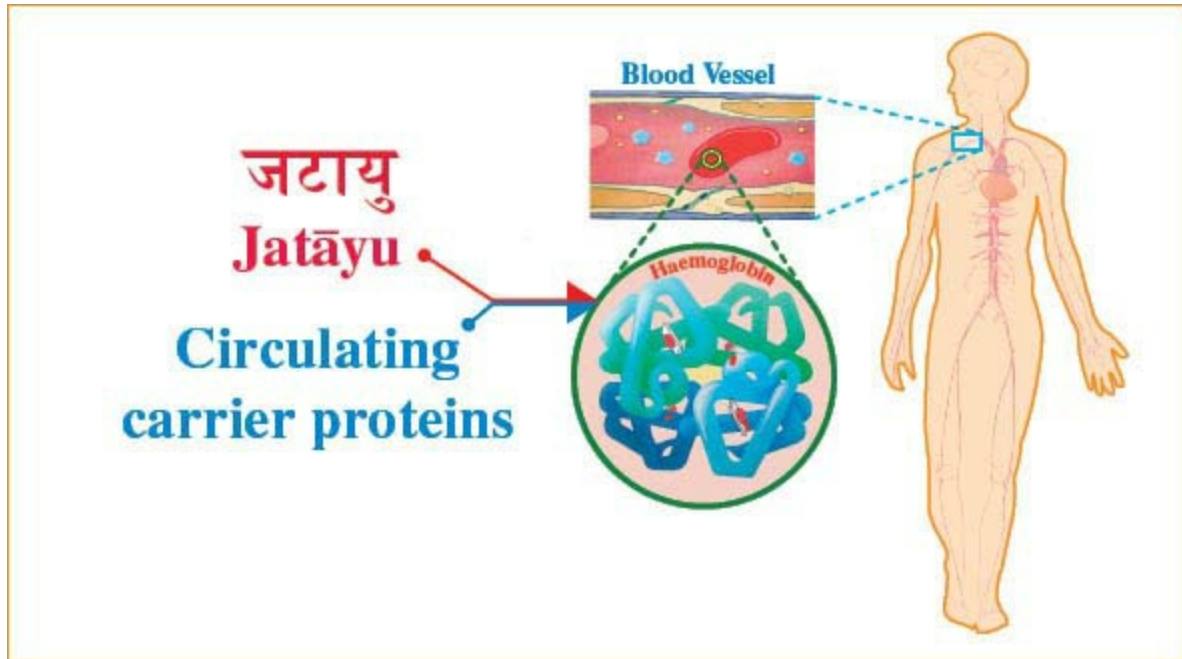
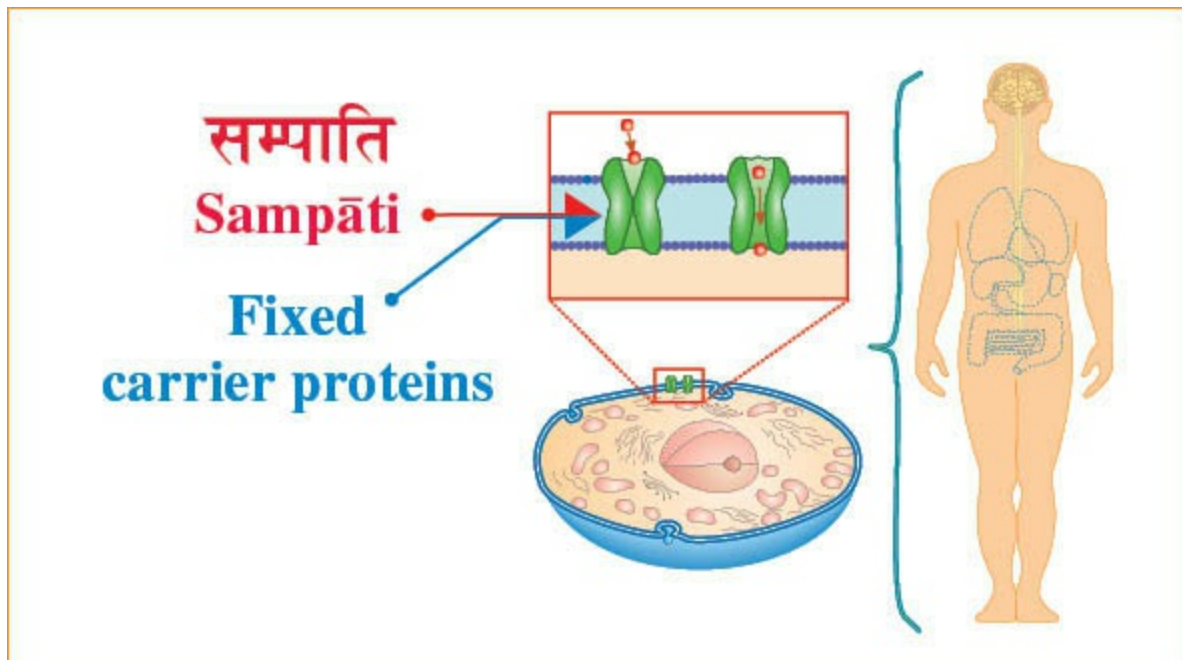


Figure 12.4 Jatāyu corresponds to the circulating carrier proteins.



**Figure 12.5 Sampāti, the brother of Jatāyu, corresponds to the fixed carrier proteins in cell membranes.**

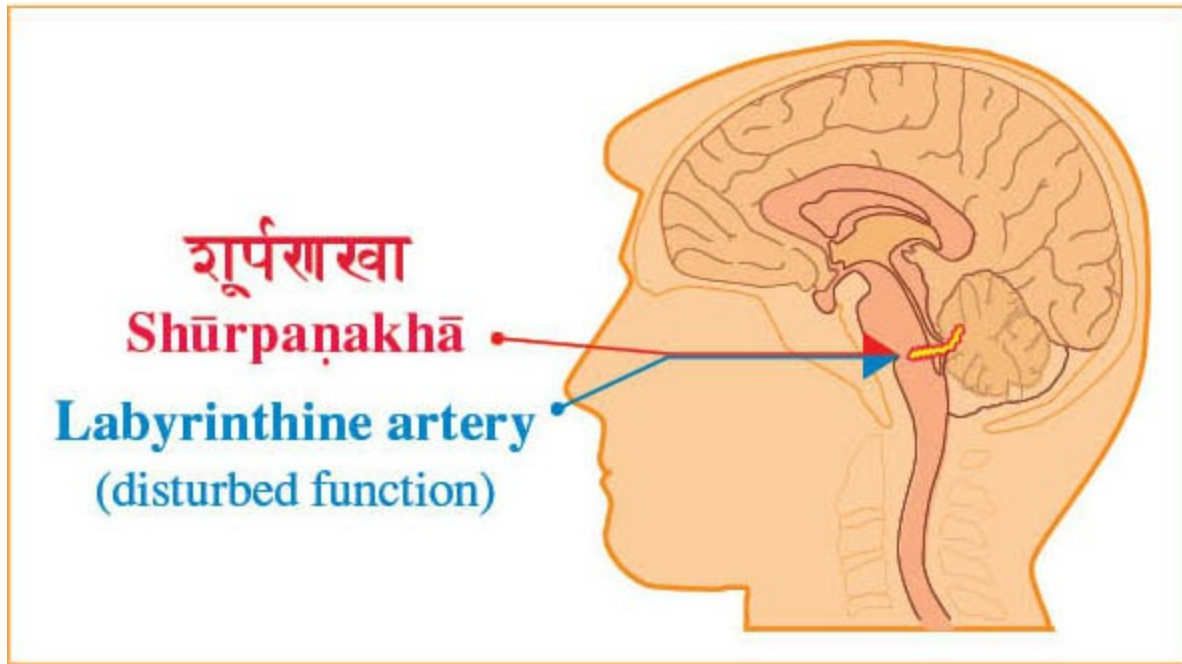
The non-circulating, or fixed, carrier proteins are attached to cells. They carry and transport molecules across cell membranes, usually from the blood to the inside of a cell. Fixed carrier proteins may also include specific gates, which play an important role in cell activity. The fixed carrier proteins correspond to Sampāti because at the time of his first appearance in the Rāmāyaṇ he was unable to fly—his wings had been burned when he approached the Sun trying to protect his brother Jatāyu. Even though he could no longer fly, he retained his ability to see very great distances. In addition to supporting cell activity, both of these transport systems are also important for the exchange of messages between different parts of the physiology. We will discuss Sampāti and Jatāyu in greater detail in Chapter XX, when we investigate molecular carrier systems.<sup>6</sup>

***Sarga 15–30: Rām’s Encounters with  
Shūrpanakhā, Khara, Dūshaṇa, and Trishiras***

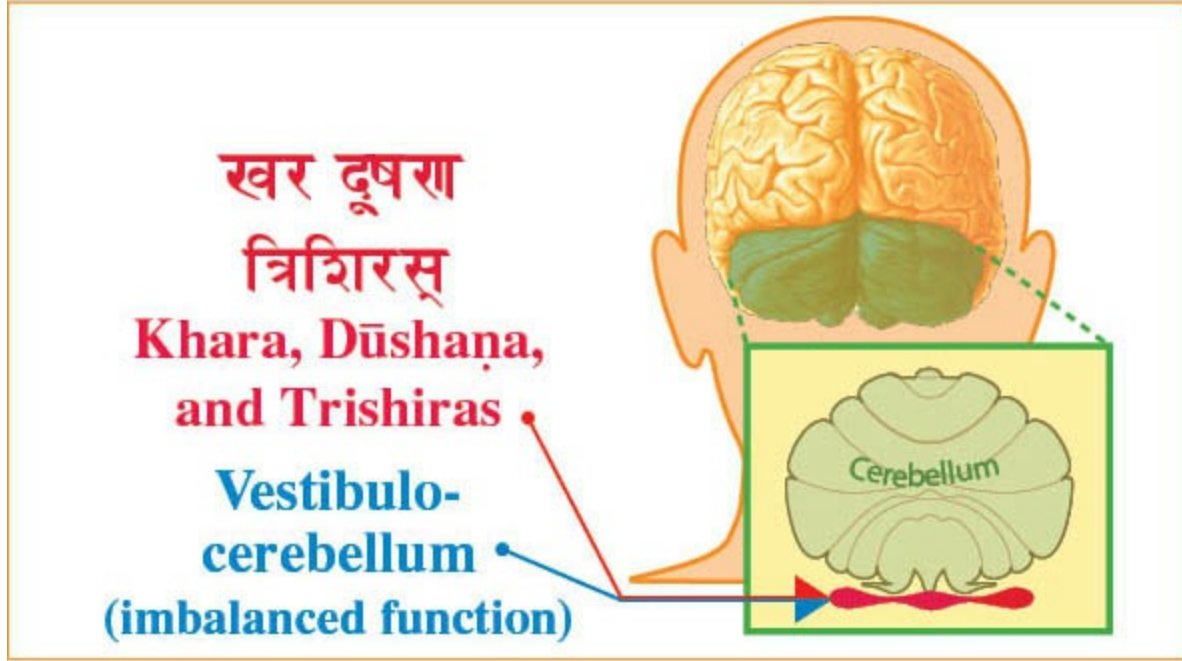
Rām and Sītā were staying at an *Āshram* in Panchavatī when Rāvaṇ’s sister, a *Rākshasī* (female *Rākshasa*) named Shūrpanakhā, came to visit. The moment Shūrpanakhā beheld Rām and Lakshmaṇ she became enamoured with them. When they refused her advances she was consumed with rage and threatened to harm Sītā. Lakshmaṇ then cut off her nose, and so she departed to seek the aid of her half brother Khara. Khara sent thousands of *Rākshasas* to kill Rām and Lakshmaṇ, but Rām destroyed them all, including Khara and his two brothers, Dūshaṇa and Trishiras.

As we have mentioned earlier, ladies in the Rāmāyaṇ correspond to arteries and the nourishment of blood flow. Rām and Sītā’s journey into the Daṇḍak forest correlates with an increase in metabolic activity in the area of the medulla oblongata. Shūrpanakhā corresponds to the labyrinthine artery in the

brainstem near the cerebellum, and her visit and the subsequent battle represents an imbalanced increase in blood flow to that area of the brain. Rām's battle with Khara and the *Rākshasa* army corresponds to the firing of neurons in the area. Khara and his brothers correspond to one form of disturbed functioning of the vestibulocerebellum, which has an important role in organizing and structuring the finer motions of the body, as well as in refining cognitive behaviour. Rām's victory over Khara and his brothers signifies that Rām, who corresponds to the inputs of the cerebral cortex, has taken control of the area.



**Figure 12.6 The Rākshasī Shūrpaṇakhā corresponds to the disturbed functioning of the labyrinthine artery.**



**Figure 12.7 The *Rākshasas* Khara, Dūshaṇa, and Trishiras correspond to the vestibulocerebellum (imbalanced function).**

In *Human Physiology: Expression of Veda and the Vedic Literature*, we identified the cerebellum with Vaisheshik.<sup>7</sup> Vaisheshik has ten major divisions, which correspond to the ten lobes of the cerebellum. In addition to this structural relationship between Vaisheshik and the cerebellum, there are also functional correspondences. Maharishi describes Vaisheshik as the embodiment of the **specifying** quality of intelligence. This corresponds to the role of the cerebellum, which specifies the exact strength, distance, and measure of every action in the physiology. When we use a key to open a door we exert very little strength, but if we need to lift something heavy then we need greater strength. The turning of a key involves fine movements of the fingers, while lifting a heavy object requires a grosser level of functioning. Both types of action and the range between them are controlled and adjusted by the cerebellum.

The cerebellum serves a very important role in *Yagya* performance. The performance of a *Yagya* entails a set of functions that are highly specific, and which together form a precise and holistic level of functioning: exact speech

must be employed at the proper time, in the correct sequence, with the *Pāṇḍit* facing the proper direction. All these motions are controlled, correlated, and adjusted by the cerebellum.

The ten lobes of the cerebellum also correspond to Lankā—Rāvaṇ's island home—as well as to Rāvaṇ, who had ten heads. Viṣṇu incarnated as Rām in order to balance the negative activity of Rāvaṇ and to place him back in tune with Natural Law, which represents Rām re-establishing balance to this important part of the physiology.

When specificity becomes extreme, it isolates itself from holistic values and becomes destructive. Rāvaṇ, his family, and their activities represent an increased level of negativity, in the sense that they were too selfish and superficial in their vision. They created chaos among the *Ṛishis* in their *Āshram*, and prevented them from correctly performing their *Yagya*. When a *Yagya* is interrupted or not performed, the *Devatās*, who administer Natural Law, are not properly nourished and balanced, and this creates turbulence in the order of the universe. It is for this reason that Viṣṇu incarnated as Rām to remove Rāvaṇ's influence.

Proper *Yagya* performance is correlated with proper functioning of the cerebellum, which when disturbed can create significant problems. Shūrpanakhā, Rāvaṇ's sister, corresponds to the labyrinthine artery in the brainstem near the cerebellum. The labyrinthine artery usually branches off from the anterior inferior cerebellar artery, which corresponds to Kaikasī, Shūrpanakhā's mother. It supplies the inner ear, including the vestibular apparatus, which is related to Viśhwāmitra. When Lakshmaṇ injured Shūrpanakhā, it evoked the activity of her brothers, who represent the vestibular part of the cerebellum. The vestibular system in the brainstem corresponds to Viśhwāmitra, and it is interesting that in these first battles with Rāvaṇ and his family, Rām subdued Rāvaṇ's brother, who is located in the vestibular part of the cerebellum (which is connected to the vestibular system). In this we see the practical value of Viśhwāmitra's training of Rām



and Lakshmaṇ.

### ***Sarga 31–66: The Abduction of Sītā***

The most significant event in the *Āraṇya Kāṇḍ* is Rāvaṇ's abduction of Sītā. After Rāvaṇ's sister Shūrpanakhā related what had happened to her, Rāvaṇ became furious and resolved to deal with Rām and Lakshmaṇ himself. He decided to abduct Sītā by drawing Rām deep into the forest in pursuit of the *Rākshasa* Mārīcha, who had assumed the form of a magical golden deer. Mārīcha was the son of Tātakā, a *Rākshasī* whom Rām killed when he was travelling with Vishwāmitra (see Chapter VIII). Mārīcha had already experienced Rām's power, so he was extremely reluctant to help Rāvaṇ, and attempted to dissuade him from his plan. But in the end Mārīcha was forced to comply.

Sītā was deeply charmed by the beautiful golden deer and begged Rām to capture it for her. Rām had a premonition that he should not leave her, but he justified his pursuit of the deer by ordering Lakshmaṇ to guard Sītā. Rām chased the deer, wounding it with his arrow, but the deer then began to mimic Rām's voice in a cry for help. Sītā heard the cry and became upset, believing that Rām had fallen into trouble. She insisted that Lakshmaṇ leave her to help Rām, and was adamant when he tried to resist.

Lakshmaṇ left Sītā in a protected area, defined by a circle that no one could enter. But as soon as Lakshmaṇ departed, Rāvaṇ arrived disguised as an old *Ṛishi*. He approached Sītā and asked for her aid, convincing her that she would bring destruction upon Rām and her family by not helping a *Ṛishi*. She fell for the trick, and when she stepped out of the protective circle Rāvaṇ captured her.

How is it possible that Rām and Sītā, the embodiments of Totality, could be fooled? Why would the embodiment of *Prakṛiti* be interested in a deer, however charming? And why did Sītā insist upon Rām pursuing it? The ultimate answer to these questions is simple: Natural Law demanded that



Rāvaṇ be destroyed.

When Sītā was abducted, Rām was forced to kill Rāvaṇ in order to rescue her. Rāvaṇ is the cerebellum, with its own autonomic activity representing Rāvaṇ's autonomy over his kingdom, and Sītā clearly identified him and led Rām to his location.

Rām's other triumphs are small compared to his conquest of Rāvaṇ—a far more significant victory than the subjugation of any inflammation or disorder in the body. The entire attention of Rām and Sītā, *Purusha* and *Prakṛiti*, must be involved in the process of re-establishing complete balance. This is the reason that the reorganization of all structures and their connections, requiring the integrated activity of both the cardiovascular and nervous systems, must take place.

Rāvaṇ corresponds not only to the cerebellum, but also to a very serious disease process. One of the most difficult disease processes encountered in the physiology is cancer, in which cell growth does not follow the physiology's instructions. Every cell in our body contains the totality of information present in every other cell of the body—every cell knows its function, and also knows its relationship to the body's other structures. The DNA of cancer cells, however, has forgotten this memory, and its cells are no longer part of the whole.

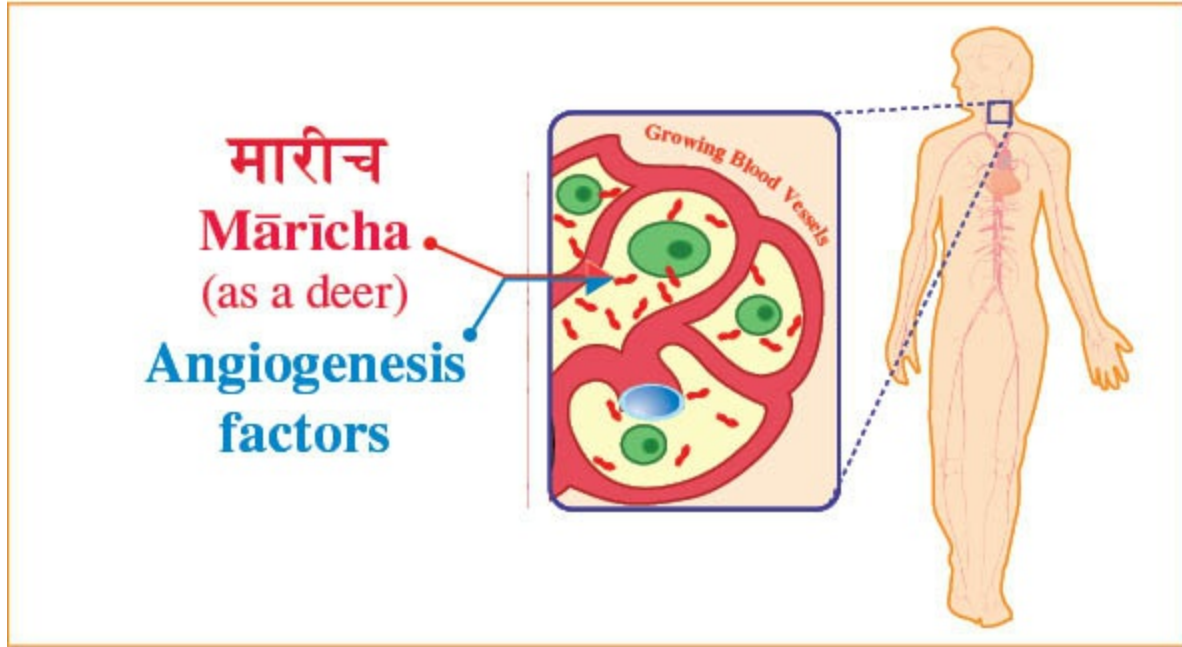
A liver cell will be a liver cell, and will perform its many functions including the secretion of certain enzymes. It has its own specific roles to play, and yet it remains in tune with the entire physiology. It never grows beyond certain dimensions, and produces the correct amount of enzymes and biochemicals. If a liver cell becomes cancerous, however, there is a change in its inner intelligence leading to a loss of memory, and this leads to its inability to remain in tune with the whole. A cancerous cell forgets the wholeness within itself and begins to multiply and grow unnecessarily, diverting energy from the rest of the body and ultimately destroying the entire body and itself. Such a cell has become extreme in its specific value, with no holistic value.

Rāvaṇ represents this kind of madness. He was completely out of tune with Wholeness, displaying a narrow-minded selfishness that was focused entirely on his small self, with no consideration or awareness of his big Self, his Cosmic Self. He took pleasure and gained strength in destruction. This corresponds to the behaviour of cancer cells, and by understanding this behaviour we can better appreciate the sequence of events in this part of the Rāmāyaṇ.

A cancer cell requires nutrition in order to become a tumour. Cells that become cancerous first secrete protein growth factors called angiopoietins, which promote the growth of blood vessels. In this way the cancer cells enliven—in a sense attract—the cardiovascular system to form new vessels. When the cancer grows, cells that produce these growth factors stimulate the vascular system to produce even more vessels.

The growth of vessels is guided by these angiogenesis growth factors. For example, whenever there is inflammation, messengers are secreted that cause vessels to grow in order to provide for increased vascularization. These growth factors act in a negative way in cancer, attracting the vessels to support the tumour. When the tumour receives its support, it gains energy and the ability to take over and destroy the physiology.

This was Mārīcha's role as the golden deer, which represents a growth factor for attracting Sītā. Sītā was naturally attracted to the deer because it is the nature of *Prakṛiti*, of the cardiovascular system, to nourish. In this case Rāvaṇ tricked her, for he wanted Sītā in the same way that a tumour wants blood vessels, without which the tumour cannot grow and complete its mission of destruction. Taking a broader view, we can say that Natural Law allowed Sītā to be drawn to the golden deer and captured by Rāvaṇ so that the nervous system (in its broadest sense including the neuro-immune system) would be able to track the cancer cells and destroy them.



**Figure 12.8** The *Rākshasa* Mārīcha corresponds to angiogenesis factors (growth of new blood vessels).

Floating within the cardiovascular system are blood cells that have the ability to tag, or mark, a cancer cell, so that the immune system will be able to readily identify and destroy it. The immune system is ultimately under the control of the holistic function of the nervous system administered by Rām. When the nervous system and the cardiovascular system work harmoniously, they are able to identify a tumour, destroy it, and recreate balance in the physiology.

Had Sītā not ‘marked’ Rāvaṇ, Rām would never have come to Lankā. He was living in the Daṇḍak forest, subduing *Rākshasas* and paying homage to the *Ṛishis*, waiting for his exile to conclude. But he had a special function to perform—to track, find, and destroy Rāvaṇ, the embodiment of negativity and a disease process threatening to destroy the entire physiology.

### ***Sarga 67–68: The Death of Jatāyu***

As Rām searched for Sītā, he came across the eagle Jatāyu lying mortally wounded. Before death overtook him, Jatāyu conveyed to Rām that it was Rāvaṇ who had abducted Sītā. Jatāyu told how he fought Rāvaṇ, tried to save her, and had even killed Rāvaṇ’s charioteer and broken Rāvaṇ’s bow, but in the end he was defeated. Jatāyu further disclosed to Rām that Rāvaṇ had taken Sītā to the south. Jatāyu then passed on, after being given liberation (*Moksha*) by Rām. Rām performed his funeral rites before continuing with the search for Sītā.

### **Vedic ‘Birds’—Garuda, Jatāyu, and Sampāti in the Physiology**

Jatāyu was the nephew of Garuda, from whom the entire race of birds is descended. The members of Garuda’s race, including his six sons, were of great might, and indeed Vishṇu himself was their protector. We will discuss the genealogy of the descendants of Garuda along with other beings and creatures of the Vedic Literature and their correspondence to physiological structures in Chapters XX and XXI. Now we will consider Garuda, Jatāyu, and Sampāti as they relate to the events unfolding in these *sarga* of the Rāmāyaṇ.

The Vedic Literature provides the earliest reference to Garuda as the mighty Shyena, who was said to have brought nectar (*Amṛit*) from Heaven to Earth. He is described as massive—large enough to block out the Sun—and possessed of divine qualities. He is also the vehicle (*Vahana*) of Vishṇu.

In the Bhagavad-Gītā, Lord Kṛishṇa described his own omnipresent nature to Arjuna in the middle of the battlefield of Kurukshetra by referring to Garuda. In this famous discourse Kṛishṇa exclaimed, ‘of birds I am the son of Vinatā (Garuda)’, indicating Garuda’s preeminence. It is also said that when Garuda flies, the sound of his wings creates the chanting of Veda. In Chapter XX, we will see that Garuda corresponds to the lungs and their ability to sustain the whole physiology through the exchange of gases, and particularly through oxygen transport mechanisms.

The Mahābhārat, the second great epic of Vedic Literature, tells the story of Garuda's birth and deeds in its first book. When Garuda first burst forth from his egg he appeared as the powerful force that consumes the world at the end of every age. The *Devatās* were frightened and begged him for mercy, and hearing their plea Garuda reduced himself in size and energy.

Garuda's father was the creator, Rishi Kashyap, and his mother was Vinatā, whose sister Kadrū was the mother of serpents. One day Vinatā entered into and lost a foolish bet, as a result of which she became enslaved to her sister. Resolving to release his mother from her state of bondage, Garuda approached the serpents and asked them what it would take to purchase her freedom. Their reply was that Garuda must bring them the elixir of immortality, called *Amṛit*. It was a tall order. The *Amṛit* was in the possession of the *Devatās* who guarded it jealously, as it was the source of their immortality. They had ringed the *Amṛit* with a massive fire covering the sky, and had blocked the road to it with a fierce mechanical contraption of sharp, rotating blades. And finally they had stationed two gigantic, poisonous snakes next to the *Amṛit* as its deadly guardians.

Undaunted, Garuda hastened toward the *Devatās'* abode, intent on robbing them of their treasure. Knowing of his design, the *Devatās* met him in full battle array. Garuda, however, defeated the entire host and scattered them in all directions. Taking water from many rivers into his mouth, he extinguished the protective fire the *Devatās* had constructed, and reducing his size he crept past the rotating blades of their murderous machine. And finally he mangled the two gigantic serpents that the *Devatās* had posted as guards.

Taking the *Amṛit* into his mouth without swallowing it, Garuda rose again into the air and headed toward the eagerly awaiting serpents. En route he encountered Vishṇu. Rather than fight, the two exchanged promises, Vishṇu assuring Garuda the gift of immortality even without drinking the *Amṛit*, and Garuda promising to become Vishṇu's vehicle. Flying onward he met Indra, the lord of the *Devatās*, with whom he also exchanged promises. Garuda

vowed that upon delivering the *Amṛit*—thus fulfilling the serpents’ request—he would enable Indra to regain possession of the *Amṛit* and take it back to the *Devatās*, and Indra in turn promised Garuda the serpents as food.

At long last Garuda alighted in front of the waiting serpents. Placing the *Amṛit* on the grass and thereby liberating his mother Vinatā from her servitude, he urged the serpents to perform their religious ablutions before consuming it. As they hurried off, Indra swooped in to make off with the *Amṛit*. From that day onward Garuda was the ally of the *Devatās* and the trusted mount of Viṣṇu, as well as the implacable enemy of snakes, upon whom he preyed at every opportunity.

We will elaborate upon the details of this story later in terms of the physiology. In summary, however, Garuda corresponds to the lungs, and his ability to bring the *Amṛit* back and forth corresponds to the lungs’ ability to send oxygen to the various tissues and clear away carbon dioxide. The various carrier proteins involved, haemoglobin in particular, correspond to the different birds that are part of the oxygenation and nutrient transport system.

Carrier proteins also transport various messages and neurotransmitters to the synapses acting on neurons (serpents), inducing them to react and perform specific functions. These functions are often started and then interrupted by the proteins that release them, and then neutralized by either destroying them or taking them back (re-uptake). The systems of release and re-uptake operate constantly on the neuron terminals, thus activating and inhibiting them—firing them and calming them. The proteins themselves keep regenerating, and the lungs keep functioning as long as the physiology is alive, and that is the immortality of this system granted by Viṣṇu.

Jatāyu’s story emphasizes his place as a circulating carrier, in this case of oxygen. We know that Rāvaṇ desired Sītā, and Sītā is the conveyor of life power in the form of oxygen and nutrients. She is *Prakṛiti*, containing the mechanisms that make the unmanifest manifest—she maintains the



physiology through the flow of blood and its oxygenation in the lungs, which brings oxygen from the air and nutrients from food to the cells.

*Prakṛiti*'s value is important for creating and maintaining the body's structure, based on the energy and power available in *Purusha*. *Purusha* and *Prakṛiti* are one, but *Prakṛiti* is the source of creation. The unmanifest *Purusha* upholds the manifest, giving it energy and power.

Earlier we described Rāvaṇ as a specific quality, such as a cancerous tumour in the cerebellum, and the cerebellum as the seat of Vaisheshik, which embodies the quality of specificity. Rāvaṇ took specificity to an extreme level, and by abducting Sītā he was attempting to strengthen his territory even further through the life-supporting elements and Laws of Nature available in *Prakṛiti*. Rāvaṇ showed his ignorance, however, by separating Sītā, who is *Prakṛiti*, from Rām, who is *Purusha*. It was a mistake to assume that one can divide Totality. It is the power of Rām and Sītā that brings fullness—*Purusha* and *Prakṛiti* are one reality. When we examine Rāvaṇ's origin in a later chapter we will see that he was an extremely powerful force of Natural Law, whose deepest unconscious desire was indeed for the connection with, and the attention of, Rām.

From one perspective, we could think that Rāvaṇ's purpose was to attract Rām's attention, so that Rām could liberate him by destroying his narrow perception of reality and attachment, which were beyond his ability to overcome alone. It is very important to understand that Rām killing Rāvaṇ means that Rāvaṇ was surrendering to Rām and becoming Totality. As king of the *Rākshasas*, Rāvaṇ committed atrocious acts, but ultimately he was searching for Wholeness. He did not uphold Wholeness in his consciousness, however, and thus created problems for himself and others. As a result he attracted Rām, which is the power of Natural Law that does not allow the existence of any specific value to remain separate from the holistic value.

Rāvaṇ's abduction of Sītā represents a critical point in the narrative. Rāvaṇ was in effect trying to capture nutrients so that he could grow and thus

overwhelm, capture, and overtake the entire physiology (own the entire world). This desire to own everything is the same impulse that impels everyone towards wanting more and more in life, and that is a natural process. However, it can become misguided when the search for everything starts to mean having everything at the expense of others, such as taking the property of others, controlling others, disregarding their rights, ignoring their presence and their search for Wholeness.

The desire to have everything is a natural tendency in human life and human evolution, but how can everyone have everything? Infinite conflicts arise from even a partial aspect of this tendency. This is one of the mysteries that finds its answer in the teachings of the Holy Tradition of Vedic Masters, as given to us in its fullness by Maharishi, and as illustrated in the Rāmāyaṇ. Owning everything, being everything, achieving everything is possible through the ownership of the Unified Field of Natural Law—through transcending and achieving the state of enlightenment through which one realises Wholeness, and knows that one is Wholeness and the master of all creation. The search for Wholeness can only be fulfilled in the one reality that contains Wholeness, in the Unified Field of Natural Law—the Inner Self, Absolute Pure Being, *Brahm*, Totality, Rām.

In the Transcendental Self one has everything. It is the Reality by attaining which everything is attained, by gaining which everything is gained. Even on the surface level of life one gains a balanced state of desire. One's needs become always evolutionary and in accord with Natural Law. In this state of inner fulfilment, all desires are fulfilled even on the surface level. There is never a feeling of lack, and others become an intimate aspect of one's Self. The whole creation is one's own being and the display of one's own fullness. There is no fear, no threat, no lack—only the experience of one state of Unity Consciousness. Whatever one desires is fulfilled without conflict, because on one hand the desire itself is balanced and in accord with Natural Law, while on the other hand there is inner fulfilment, with no sense of insecurity or fear.

Jatāyu tried to prevent Rāvaṇ from abducting Sītā, but was destroyed. As a bird, Jatāyu's main function was to be an airborne carrier, similar to the transport systems in the physiology. He also provided information to Rām, and therefore played the role of a messenger. And of course he defended Sītā, thus participating in the defence mechanism, even though this was not his primary function. These carrier, information, and defence functions can be seen in certain complex molecules in the physiology, which may have a primary role but which also perform other important functions.

Jatāyu corresponds to haemoglobin. Haemoglobin is a protein that transports oxygen from the lungs to the rest of the body (see [figure 17.19](#)). It is present mostly in the red blood cells, comprising about 97% of the red blood cells' dry content. In other words, red blood cells are mainly haemoglobin with water. The special binding capacity of haemoglobin to oxygen allows it to increase the total blood oxygen capacity seventy fold. It is known that birds living at high altitudes have special haemoglobin molecules with an even greater oxygen affinity. Jatāyu, who flew near the Sun—higher than any normal bird could fly—therefore had developed a strong affinity to oxygen, as evidenced by his courageous protection of Sītā.

During the normal breathing process, haemoglobin changes its three-dimensional structure when it releases oxygen to the tissues and becomes a carrier of carbon dioxide. Every time oxygen is released to the tissues, the haemoglobin must travel back to the lungs and pick up fresh oxygen. This physiological process is accompanied by a change in the structure of the molecule. These natural periods of rest and activity with respect to the transport of oxygen can be compared to the cyclic opening and closing of Jatāyu's wings.

However, the process becomes pathologic when a more dramatic change in the configuration takes place due to toxic influences, and as a result the haemoglobin is restricted in its capacity to pick up and release oxygen. The interaction with Rāvaṇ and the ensuing physical transformation of Jatāyu (his

wings were severed) corresponds to a pathological change. The loss of Jatāyu's wings can be compared to the conformational change of the haemoglobin molecule into methaemoglobin, in which an iron atom loses one electron and haemoglobin becomes oxidized, and thus not able to carry oxygen to the tissues. This process can be caused, for example, by exposure to chemical agents and toxins, which corresponds to Rāvaṇ's attack with his dangerous weapons.

The resulting methaemoglobin is no longer an oxygen carrier, as it cannot bind oxygen, therefore impairing the transport of oxygen. Rāvaṇ 'won' the battle with Jatāyu and forcefully abducted Sītā, but by wounding Jatāyu Rāvaṇ curtailed his chance to access Sītā's nourishing quality, represented by the life-giving oxygen. Furthermore, the wounded Jatāyu put extreme pressure on the entire physiology and particularly on the nervous system (Rām's domain), which provoked Rām who then went after Rāvaṇ.

The maintenance of tissue oxygenation requires proper blood circulation and a proper carrier of oxygen in the blood. Interruption of blood circulation (the absence of Sītā), and/or the inability to carry oxygen in the blood—such as in the transformation of haemoglobin into methaemoglobin (Jatāyu's transformation)—leads to asphyxia. Asphyxia puts the whole body under extreme stress and danger. The first organ that feels this life-threatening situation is the nervous system, which becomes extremely agitated while sensing the threat of the destruction of the entire physiology. This is what took place at the critical moment when Sītā was abducted and Jatāyu was immolated.

Haemoglobin also performs functions in cells other than red blood cells. Cells that also contain haemoglobin include the A9 dopaminergic neurons in the substantia nigra. This haemoglobin does not circulate, and is associated with the nervous system cells involved in information processing, thus corresponding to Jatāyu giving information to Rām.

Haemoglobin is also contained in macrophages (protecting the physiology

from foreign material, thus corresponding to Jatāyu's role in trying to save Sītā by fighting Rāvaṇ), alveolar cells, and mesangial cells in the kidneys. In these tissues haemoglobin has a non-oxygen-carrying function as an antioxidant and a regulator of iron metabolism (which corresponds to Sampāti, who protected Jatāyu from being burned by the Sun—antioxidant function).

Rām performed Jatāyu's final rites by putting him into the fire. Burning uses oxygen and produces carbon dioxide, and that is what happens to haemoglobin after releasing oxygen—it attaches to carbon dioxide. In this case haemoglobin is not destroyed, it is put at rest with respect to its normal functioning—Jatāyu is transformed into a carrier of carbon dioxide instead of oxygen.

Rāvaṇ's abduction of Sītā and Jatāyu's death indicate a serious, life-threatening condition that tests Rām's ability to bring his own *Prakṛiti* back to himself. By destroying Jatāyu and abducting Sītā, Rāvaṇ was the victor in this part of the battle.

In order to convert methaemoglobin back into the normal oxyhaemoglobin, the body must activate special enzymes. This corresponds to the activities of Rām and his supporting forces to free Sītā and re-establish order in the physiology.

The abduction of Sītā is especially challenging to our understanding of Rām, because for the first time we see him become highly emotional, lamenting his and Sītā's fate (see *sarga* 61–63). And in *sarga* 64 Rām erupted in anger against everything in the three worlds including the *Devatās*, even threatening to annihilate all existence:

ममास्त्रबाणसम्पूर्णमाकाशं पश्य लक्ष्मण  
असम्पातं करिष्यामि ह्यद्य त्रैलोक्यचारिणाम्

*Mamāstra-bāṇa-sampūrṇam ākāśhaṁ pashya Lakshmaṇ  
asampātam karishyāmi hyadya trailokya-chāriṇām  
(Āraṇya Kāṇḍ, 64.59)*

*Behold, Lakshmaṇ, the sky filled with my arrows and Astras. Today I  
will put an end to the activity of the three worlds.*

Indeed, Rām threatened to destroy everything, and in subsequent verses he enumerated the different aspects of creation that he would destroy. Among other things he would arrest the movement of the planets, crush the mountains, dry up the oceans, eliminate the happiness of every living being, and even annihilate the *Devatās*. His anger is powerful and moving, but almost shocking to one who does not understand that without *Purusha*, *Prakṛiti* does not, and cannot, exist. *Prakṛiti* is the force of Natural Law that creates all expressed values on the basis of *Purusha*'s pure intelligence.

From the perspective of waking consciousness, separation and loss are the reality of life. Viṣṇu is considered to be separate from Shiva, and each *Devatā* is thought to be separate from other *Devatās*, as if they are independent of each other. But in Unity Consciousness we discover that everything is *Brahm*, everything is Totality, everything is Wholeness—a state of Unity that includes our self as the Self of the galaxies and the Self of the *Devatās*. This perspective is beautifully expressed in the *Mahāvākyas* of the Upanishad, which declare:

अहं ब्रह्मास्मि

*Ahaṁ Brahmāsmi*



(*Bṛihad-Āraṇyak Upanishad, 1.4.10*)

*I am Totality.*

अयम् आत्मा ब्रह्म

तत्त्वद्वयमसि

*Ayam Ātmā Brahm*

*Tat Twam Asi*

(*Māṇḍūkya Upanishad, 1.2*)

(*Chhāndogya Upanishad, 6.11.3*)

*This Ātmā is Brahm.*

*Thou art That.*

सद्ब्रह्म खलु इदं ब्रह्म

*Sarvaṁ Khalu Idam Brahm*

(*Chhāndogya Upanishad, 3.14.1*)

*All this is Brahm—Totality, WHOLENESS.*

To think that *Purusha* is different from *Prakṛiti* or that *Prakṛiti* can survive or exist without *Purusha* is an illusion. The concept that *Purusha* and *Prakṛiti* are different is the result of *Pragyāparādh*, the mistake of the intellect. If we consider *Sītā* to be separate from *Rām*, *Prakṛiti* to be separate from *Purusha*, then we see *Purusha* without *Prakṛiti*, which implies only absolute, pure existence, with no relative. The *Brahm Sūtra* describes *Brahm* as the devourer of everything,<sup>8</sup> and if we see *Purusha* alone as the state of infinite silence as Maharishi has described, then we can assume an absence of trees, mountains, *Devatās*, or anything other than *Purusha*. *Purusha* is the field of all possibilities, but when it is experienced by itself nothing exists. The *Nāsadiya Sūkta* of Ṛk Veda (10.129) describes the reality of *Purusha* as emptiness, dark, flat, pure, unshaken, without waves or change—only pure existence.

Thus *Rām* proclaims that if the *Devatās* want *Rām* to be without *Prakṛiti*, then the outcome will be annihilation—nothing will exist. Without *Prakṛiti* there is no expression of the Self, the Self remains hidden within itself;

without *Prakṛiti* there can be no manifest creation, and Natural Law will not exist as such.

It is in this context that we can understand Rām's declaration:

त्रैलोक्यं तु करिष्यामि संयुक्तं कालकर्मणा  
न ते कुशलिनीं सीतां प्रदास्यन्ति ममेश्वराः

*Trailokyam tu karishyāmi saṁyuktam kāla-karmaṇā  
na te kushalinīm Sītām pradāsyanti mameshwarāḥ  
(Āraṇya Kāṇḍ, 64.61)*

*If the Gods do not return Sītā in a healthy state, I will destroy the three worlds all together.*

The world has become too focused upon the specific value of *Prakṛiti*, forgetting that the totality of *Prakṛiti* is itself total *Purusha* and not merely an aspect of *Purusha*. This agony of separation grips *Prakṛiti*, which is why the *Rishis* were upset and anxious for the world, continuously trying with great force and firmness to correct it. It is a loss to life, a loss to Brahmā's beautiful creation, if there is no Wholeness to support life on Earth. Existence will become non-existence, and, as Rām described, the trees will be removed and everything will be turned to nothingness.

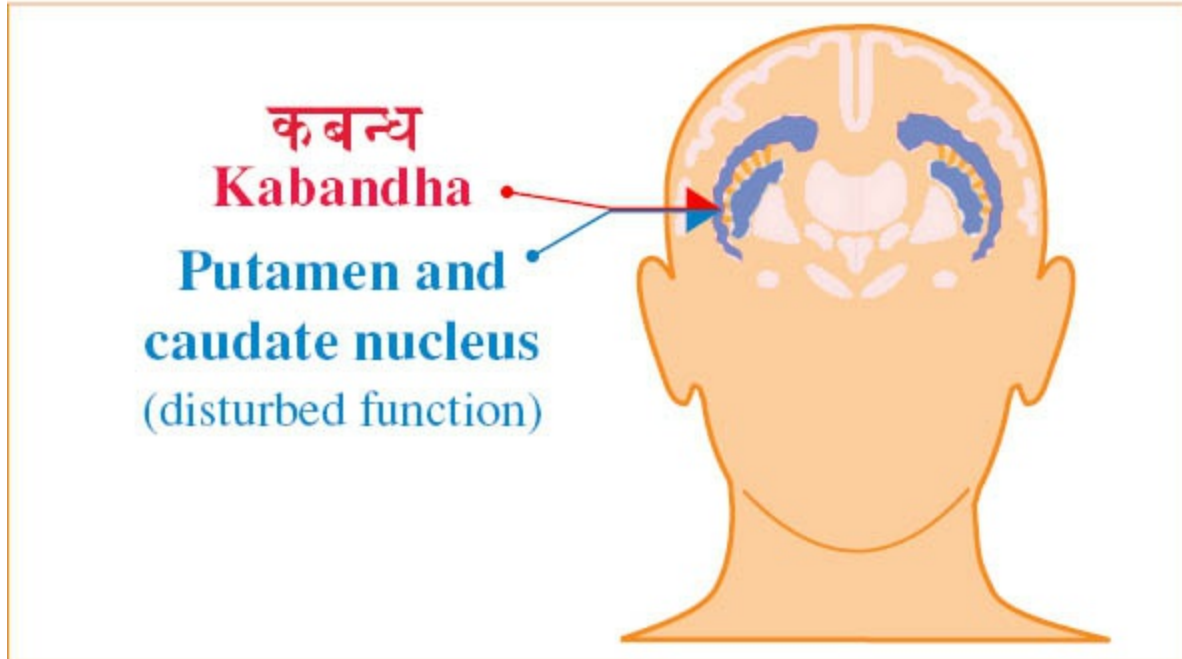
We can see how this passage also describes the loss of physiological integration. Separation of the cardiovascular system from the central nervous system would naturally result in a state of asphyxia. We can imagine the result of depriving an individual of oxygen—the body would become wildly agitated as it gasps for breath. If asphyxia continued for long enough the body would go into a coma, and if it continued for more than a few minutes—from 5 to 10 minutes, depending on the individual and the state of metabolism—the physiology would cease to function. Such a state of

asphyxia would first be felt by the nervous system and the brain structures, which are most susceptible to being destroyed, and which include the locations in the physiology of the *Devatās* and the planets. This is what Rām predicted when he said, ‘I will destroy the three worlds all together’. He was not so much making a threat to destroy as he was expressing what would happen if Sītā were to remain in captivity.

Thus, when Rām said that he would turn everything to ashes if *Prakṛiti* were separate from him, it was not an intellectual conclusion, nor the product of anger, spite, or fear—he was uttering the reality of Natural Law. When the balance of Nature is not properly maintained, destruction is the automatic result.

### ***Sarga 69–73: Rām’s Confrontation with Kabandha***

As Rām and Lakshmaṇ left the Daṇḍak forest, they encountered a *Rākshasa* named Kabandha, who had become deformed as the result of both the curse of a *Ṛishi* and a battle with Indra. In the battle with Indra, he had been severely mutilated but not killed, due to a boon from Brahmā. To allow him to survive, Indra gave him enormous arms and placed his mouth with large teeth in his belly. Kabandha was cursed to remain a *Rākshasa* until he met Rām and Lakshmaṇ. Once they defeated him and severed his arms, he was permitted to return to Heaven in his true form.



**Figure 12.9 The *Rākshasa* Kabandha corresponds to disturbed functioning of the putamen and caudate nucleus.**

Kabandha corresponds to the area of the basal ganglia called the putamen and the caudate nucleus. The putamen and caudate nucleus receive information from both the cerebral cortex and the thalamus, and correspond to the planets Shani, Rāhu, and Ketu.<sup>9</sup> Similar to Shani, they are servants who receive orders, and similar to Rāhu and Ketu they grasp information and then release it. The putamen and caudate nucleus are attached to each other and form a continuous structure, even though they are different nuclei. Their appearance is like the form of Kabandha, with a rounded body with two long arms. Extending from the rounded shape of the putamen to the caudate are thick nerve tracts or connections, which, as we can see in figure 12.9, resemble long, sharp teeth.

Kabandha was as big as the Sun (Sūrya) and the Moon (Chandra), and the Sun and the Moon correspond to the thalamus and hypothalamus.<sup>10</sup> The putamen resembles the globular shape of the hypothalamus and the thalamus. Abnormal functioning in this area corresponds to a *Rākshasa*. When

Kabandha assumed his original form and ascended to Heaven, it signified that the area was then under the control of wholeness, guided by the holistic functioning of the brain.

Another interesting feature of this story is the fight between Kabandha and Indra, which led to Indra's curse. Indra, the mind, is highly influenced by the actions of the putamen and the caudate nucleus. In clinical studies in which the putamen and caudate nucleus are functioning abnormally, we find that patients develop mental disturbances such as abnormal cognitive functioning and depression. However, when this area is functioning normally, it supports the normal functioning of the entire brain and the mind.

When Kabandha was cremated, he was released from his curse and assumed his original form as Dhanu, a divine being. As he ascended to Heaven, Dhanu suggested to Rām that he seek out and make friends with Sugrīva, a *Vānara* king who would be able to help him in exchange for a favour.

If we analyse this part of the Rāmāyaṇ in terms of the physiology, we see that dangerous tumours or abnormalities have developed, which the physiology will need to destroy through mechanisms under the nervous system's control. However, the body is constructed so that it is difficult for the nervous system to directly reach certain types of anomalies, such as a tumour located within an organ. The nervous system can receive sensory information such as pain and discomfort from these areas, but in order to implement corrective action it must engage the endocrine system.

The endocrine system consists of glands that secrete hormones, which are able to create powerful, beneficial effects throughout the physiology. The glands of the endocrine system have a special hierarchy and generally utilize complex feedback loops. The master gland of the endocrine system is the pituitary gland, which is connected to the nervous system by the pituitary stalk. The pituitary stalk is in turn connected to the hypothalamus. This interconnection between the nervous system and endocrine system is called the neuroendocrine axis.

The next two *Kāṇḍa* will focus almost exclusively on the endocrine system and its connection to the nervous system. We will see that the hormones and endocrine system correspond to the *Vānara* and their chief, along with the divine Hanumān.

### ***Footnotes***

1. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 182.
2. See Chapter XVII, [Ṛishi Sharabhanga](#).
3. See Chapter XXI, [Surasā](#).
4. See Chapter II, [The Neuron and Neural Circuits](#).
5. See Chapter I, [Total Knowledge of Natural Law Is Contained Not Only in the Sounds of Veda, but Also in the Silent Gaps Between the Sounds](#).
6. See Chapter XX, [Molecular Carrier Systems: Aruṇa, Jatāyu, and Sampāti](#).
7. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 148–150.
8. अत्ता चराचरग्रहणात्  
*Attā charāchara grahaṇāt*  
(*Brahm Sūtra*, 1.2.9)  
*Whole Prakṛiti is eaten up—Brahm is the devourer of all diversity.*
9. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, section 10.
10. Ibid.



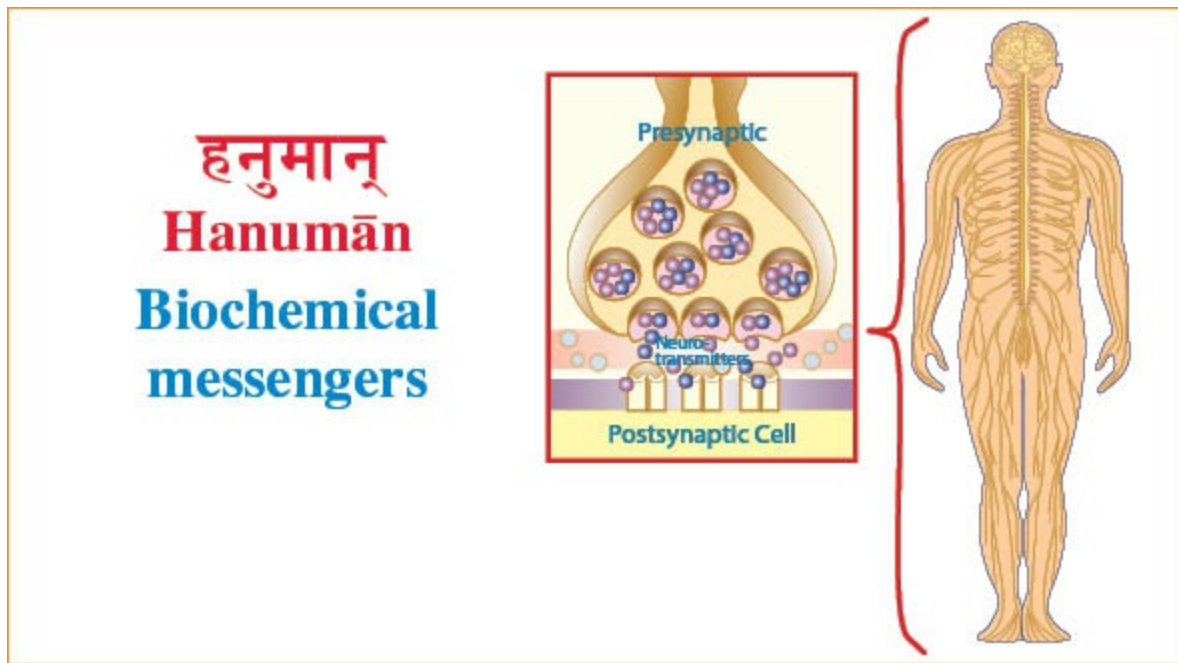


# Chapter XIII

## *Kishkindhā Kāṇḍ*

### *Sarga 1–2: Rām Meets Hanumān*

**K**ishkindhā is the name of a land in ancient India inhabited by *Vānara*, who are traditionally depicted as a monkey-like race of beings. It is in this chapter that we first encounter Hanumān, who is to this day revered for his one-pointed devotion and loyalty, as well as for his immense strength and power. Hanumān appeared during the search for Sītā, and quickly allied himself with Rām, becoming his great devotee and friend. At the time, Hanumān was hiding in the forest with Sugrīva, who was anticipating a new battle with his brother Valī, the current king of the *Vānara*.



**Figure 13.1 Hanumān corresponds to the biochemical messengers.**

Hanumān corresponds to all biochemical messengers, such as hormones, neurohormones, neurotransmitters, etc. These include hormones secreted by the pituitary gland, which are distributed throughout the physiology and

which often activate other glands. Hanumān's activities in the Rāmāyaṇ perfectly describe the functions of the hormonal messengers secreted into the bloodstream, which create various effects throughout the physiology.

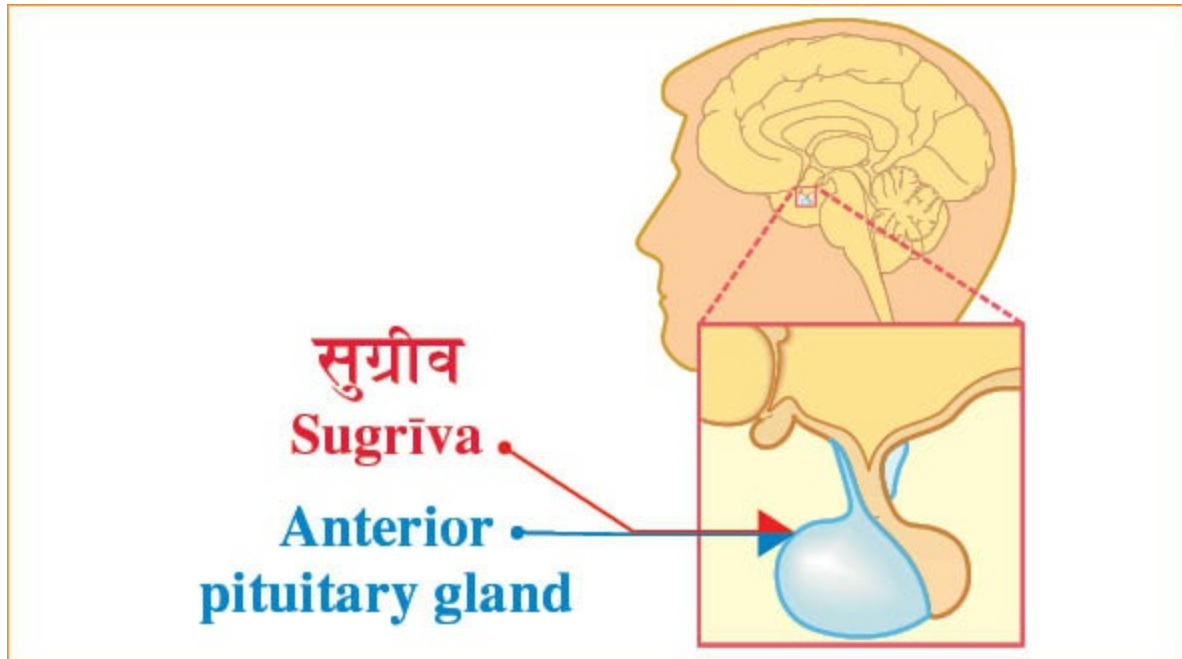
Hanumān and Sugrīva's concealment in the forest corresponds to the inhibition of hormonal activity that takes place when the pituitary gland is functioning improperly. This is usually the result of a physiological abnormality or disease, and is incompatible with a balanced state. Hanumān at that point represents a hormonal system that is not properly connected to the higher areas of the brain. Rām, as we know, corresponds to the higher cortical areas, particularly the supplementary motor cortex, which exerts a controlling, alerting, adjusting, and balancing influence upon the entire physiology. When this ruling part of the physiology is not functioning properly, hormonal activity is abnormal and imbalance prevails, thus undermining homeostasis.

Hormones are secreted by different endocrine glands. The master gland is the pituitary, which secretes hormones that regulate the activity of most glands in the body. The pituitary gland is situated at the base of the brain, deep behind the middle of the forehead. It has long been the tradition in India to mark this area on the forehead with a small dash of colour called a *tilak*.

The pituitary gland is the king of the hormonal system, and in this capacity it guides all of Hanumān's activities. It is regulated by the hypothalamus, which in turn is controlled by the higher areas of the brain associated with Rām.

The relationship between higher brain areas and the hypothalamus has led to a speciality in modern medicine called psychoneuroendocrinology. In this speciality, scientists and physicians study the effects of various cognitive functions, such as emotions, perceptions, and thoughts on the hormonal system. They have found a direct neuronal connection between frontal parts of the cortex and the hypothalamus, as well as several pathways that interconnect the cortex as a whole with structures that directly influence the activity of the hypothalamus. Rām, in his most expanded representation in the

physiology, corresponds to the entire cerebral cortex—including areas associated with his brothers—and ultimately to the entire brain and nervous system. This higher cortical and cognitive interaction with the hormonal system corresponds to the interaction between Rām and Hanumān. Thus, even though Hanumān was under the authority of Sugrīva (the anterior pituitary gland), when he met Rām he discovered his true Lord.



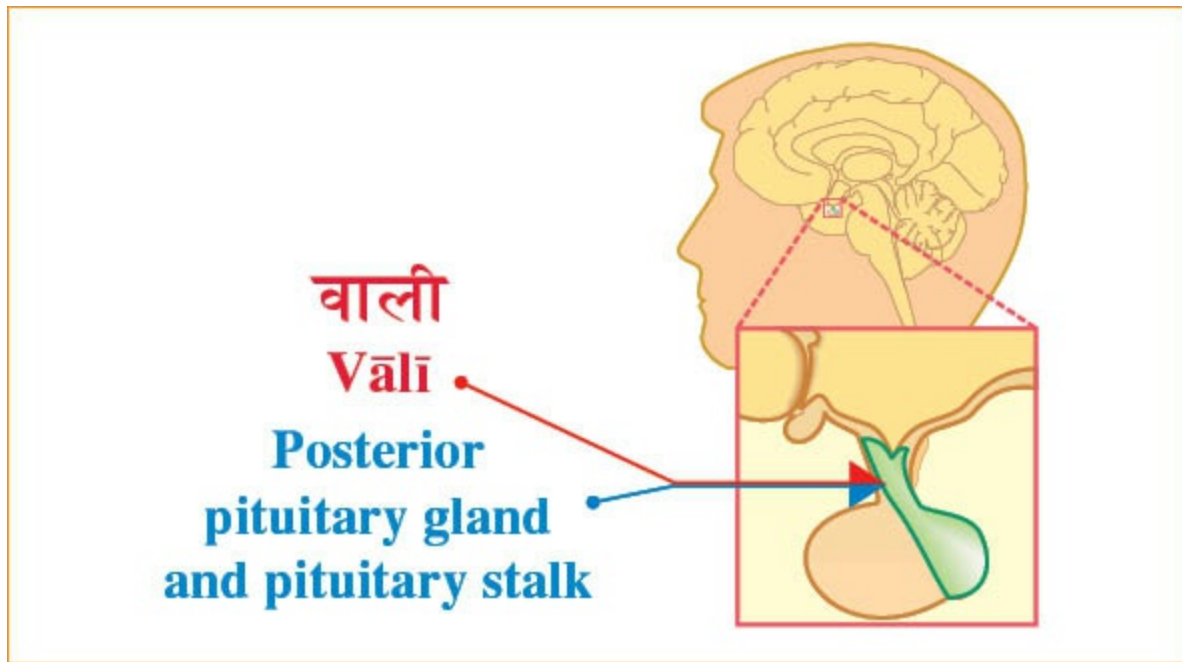
**Figure 13.2** The *Vānara* chief Sugrīva corresponds to the anterior pituitary gland.

When Rām entered the forest, Sugrīva immediately sent Hanumān to enquire who he was and what his plans were. Realizing Rām’s supreme nature, Hanumān was overjoyed and filled with devotion—his true Lord had appeared. This describes the situation in which hormonal activity is directly connected to the higher cortical areas of the brain. Even though homeostatic mechanisms have the ability to make automatic adjustments, they must be in tune with higher cortical areas in order for the physiology to function in an integrated manner.

### ***Sarga 4–10: The Origins of Vālī and Sugrīva***

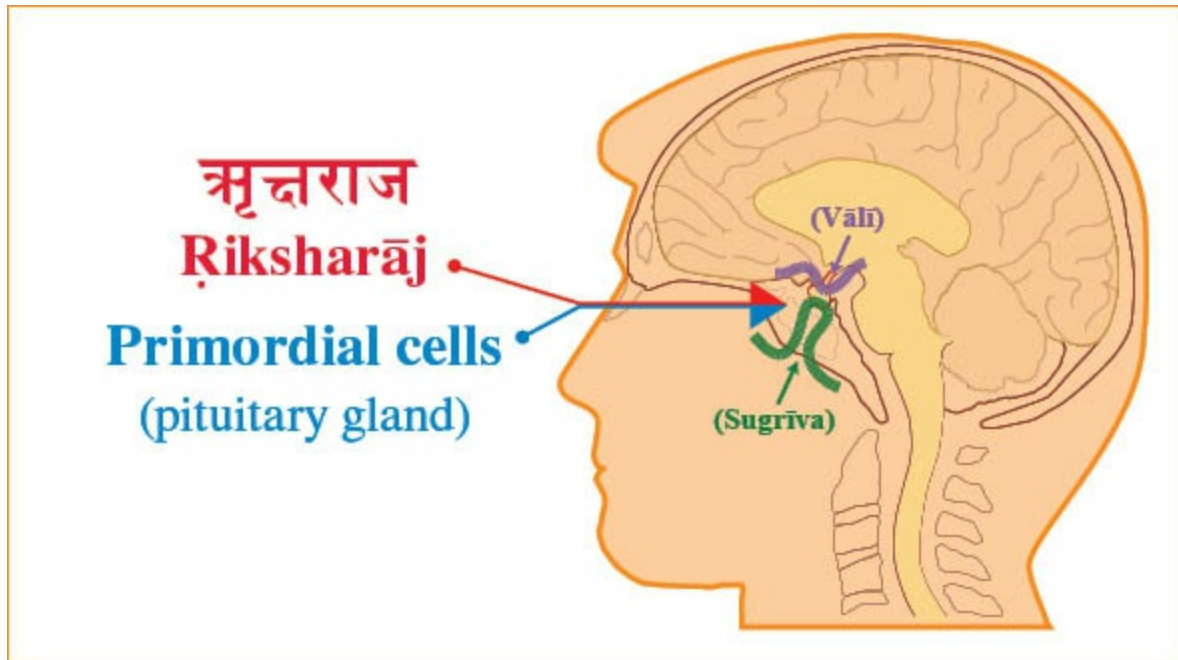
## and the Story of their Conflict

After Hanumān met Rām, he brought him to Sugrīva. Sugrīva corresponds to the anterior pituitary gland, and his brother Vālī represents the posterior pituitary gland and pituitary stalk. In order to understand Sugrīva and Vālī's relationship and their respective places in the physiology, we must first examine their origins.



**Figure 13.3** The *Vānara* chief Vālī corresponds to the posterior pituitary gland and pituitary stalk.

According to the Rāmāyaṇ and other Purāṇic accounts, Sugrīva and Vālī were descended from Ṛiksharāj, who was born from the tears of Brahmā, and was the first king and ancestor of the *Vānara*. This account indicates that Ṛiksharāj was formed at the primordial level of cellular manifestation, the primordial cells of the pituitary gland. Ṛiksharāj gave rise to an entire generation of *Vānara*, who correspond to the hormones and messengers. All the gland cells and other aspects of the body related to hormonal secretion originate from these primordial cells, which we can consider to be the tears of Brahmā.



**Figure 13.4** The original *Vānara* king Ṛiksharāj corresponds to the primordial cells (ascending and descending cell groups) of the pituitary gland.

The term ‘tears of Brahmā’ also indicates that the hormones flow through the physiology by means of fluids, particularly the blood. The tears of Brahmā are said to flow to his hand and emerge from his hand. The hands correspond to the body’s periphery. Hormones are secreted from the glands located mainly in the centre of the body, into the fluids that carry them to the peripheral areas.

Vālī is said to have been born from his father’s head through the intervention of Indra. Sugrīva was born from his father’s neck, through the intervention of Sūrya. These stories are interesting in terms of the embryological development of the pituitary gland. The anterior pituitary gland and the posterior pituitary gland and pituitary stalk are derived from two sources. When examined microscopically, the pituitary gland can be seen as two separate parts that come together in one gland. One part descends from the diencephalon, which is in the middle of the brain, and the other migrates up from an area that is close to the palate, or roof of the mouth, near the neck.

These two parts come together to form the pituitary gland, the master gland that controls the hormonal system. Therefore they are both kings of the *Vānara*, but one has come from the head while the other comes from a lower area near the neck.

Vālī represents the posterior pituitary gland and pituitary stalk, which descend from head, while Sugrīva represents the anterior pituitary, which ascends from the palate or neck area. Together Vālī and Sugrīva form the pituitary gland. When Ṛiksharāj passed away, Vālī became the king of the *Vānara* and Sugrīva supported his brother, until a conflict arose between them.

The incident occurred when Vālī and Sugrīva followed an *Asura* (a demon) named Māyāvī into a cave to kill him. Vālī asked his brother to wait outside the entrance, explaining that if milk flowed from the cave it would mean that he had killed the *Asura*, but if blood appeared it would mean that he was dead, and that Sugrīva should then seal the cave and take over his role as king. Vālī eventually killed Māyāvī, but according to the *Purāṇic* version the *Asura* used a spell to change the milk coming from him into blood. Seeing the blood, Sugrīva assumed that Vālī had been killed and sealed the cave as instructed, returning home to become king of the *Vānara*. When Vālī later returned he was furious with what appeared to be his brother's betrayal, and exiled Sugrīva and took his *Patnī*.

When Vālī went into the cave, he was entering the sella turcica, which is the scientific name for a cave-like structure within the skull. As the pituitary stalk, Vālī is able to penetrate the membrane covering the sella turcica and connect with the brain, whereas the anterior pituitary, Sugrīva, must remain at the 'entrance'. Deep inside the 'cave' is a further extension up to the brain, but the anterior pituitary gland does not cross this limit—it originates in the palate and does not contain nerve cells, and is not directly connected to the brain. This explains why Sugrīva must remain at the entrance.

Vālī's destruction of the *Asura* and the blood pouring from the cave

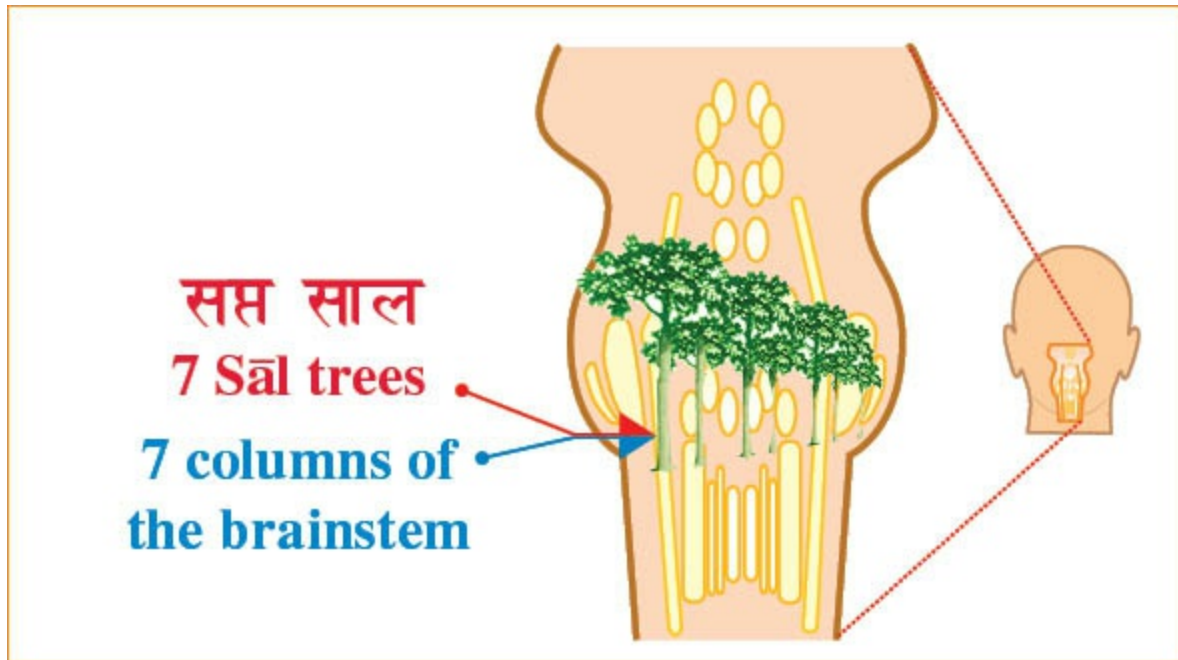


correspond to the secretion of hormones directly into the bloodstream, which are dissolved in blood. Within the pituitary stalk is the portal system, a system of blood vessels located in the pituitary stalk that collects the controlling factors secreted by the hypothalamic neurons and brings them to the anterior pituitary gland.

The hormones represent the milk that becomes dissolved in the blood. When Vālī came out of the cave and found that he no longer had Sugrīva's support, he responded by taking away his *Patnī*. As we have seen before, women in the Rāmāyaṇ represent blood vessels, so Vālī was in effect 'shunting', or diverting, the blood vessels that nourish the anterior pituitary, Sugrīva. He took away the nourishment from the anterior pituitary, and brought it to the pituitary stalk and posterior pituitary gland, which correspond to himself. This is similar to the earlier description of Rāvaṇ abducting Sītā in order to shunt the nourishment of the cardiovascular system away from Rām. When Vālī reclaimed his kingdom and took Sugrīva's *Patnī*, he further humiliated Sugrīva by stepping on his head. This refers to the superior position of the pituitary stalk and its ability to control the anterior pituitary gland.

### ***Sarga 11: Sugrīva Tests Rām***

Upon meeting Rām, Sugrīva asked for his aid in subduing Vālī. Sugrīva felt that he had been unfairly treated, and wanted his kingdom back. But he was so overwhelmed by his brother's power that he first tested Rām to be sure that he would be capable of defeating Vālī. He described Vālī's great prowess to Rām, along with his brother's ability to shoot seven arrows, one after the other, through seven large *Sāl* trees. To reassure Sugrīva, Rām notched a single arrow on his bow and released it, piercing seven *Sāl* trees with his arrow. The arrow then flew on, first to six subterranean regions and then to a seventh, before returning to Rām's quiver. Sugrīva was overwhelmed and deeply reassured by this remarkable feat.



**Figure 13.5 The 7 *Sāl* trees correspond to the 7 columns of the brainstem.**

This story presents an interesting physiological correlation, which first relates to the seven columns within the brainstem, the seven pillars of the brainstem. These correspond to the seven *Sāl* trees, which have large trunks and many branches extending upward. The seven *Sāl* trees are similar in shape to the seven brainstem columns. Each column consists of a ‘trunk’ of neurons and nuclei that divide into different branches, forming an arborization as they extend up towards the central nervous system. Each column receives information from the spinal cord, and to pierce them with an arrow means to stimulate them. Vālī’s piercing them with his arrows is a description of the pituitary gland sending hormonal impulses into the body tissues. The fact that Vālī can pierce only one tree at a time means that the information comes to only one area at a time.

Rām, however, pierced all seven trees with a single arrow. Rām, we know, represents the total brain, and when there is an output from the brain to these areas, it comes through the descending cortical tracts and is distributed to all seven columns simultaneously, resulting in a coordinated action. For

example, when a pianist plays with an orchestra he must simultaneously coordinate many aspects of complex muscle movements, hearing, seeing, intellectual assessment, and feeling. This is possible because the nervous system is able to integrate all the inputs and outputs harmoniously and simultaneously. This is the one arrow of Rām piercing the seven trees.

The inputs from the hormones, however, are not simultaneous, since different inputs come from different tissues and the information is then relayed to different areas. Input from the periphery of the body is always separate and specific, while information sent from the central nervous system—from the cerebral cortex—is integrated and simultaneous.

Rām has the ability to hit all the *Sāl* trees—the brainstem columns—at the same time and join them together, even though they seem to be separate. This reveals the unity that lies at the basis of the diversity of all Rām's actions. When diversity is expressed from its basis in Unity, it becomes unified. It is holistic, even though to our senses it appears as if different values are being expressed. Rām, as the embodiment of Unity and Wholeness, hit all seven *Sāl* trees as if they constituted one target.

It is interesting that Rām's arrow continued to the six subterranean regions, which correspond to areas in the spinal cord. The inputs from the descending neuronal tracts via the pyramidal tract to the spinal cord go to six layers within the spinal cord called the motor layers of Rexed. The pyramidal tract refers specifically to Rexed layers 6, 8, and 9, on both sides of the spinal cord, making a total of six layers. These correspond to the six subterranean regions pierced by Rām's arrow.

These six layers receive the input from the descending cortical areas. The path of Rām's arrow through the seven *Sāl* trees and down the spinal cord to the six subterranean regions, describes how outputs from the Rexed layers are distributed to all the different parts of the physiology, such as the autonomic nervous system and the muscles. The arrow continued to the seventh subterranean region, which corresponds to the periaqueductal grey area. The

periaqueductal grey area also receives input from the cortical areas, mostly indirectly via the other six, but is different from the other six Rexed layers.

After Rām shot his arrow, Sugrīva recognized his supreme abilities and bowed down to him, indicating that the king of the hormonal system was now under the control of the holistic coordinated activity of the brain.

### **Rām's Arrows Return to His Quiver**

Rām's arrows always returned to his quiver, which corresponds to feedback mechanisms that inform the central nervous system about specific activities that have taken place. These provide important information about the degree of success of an action. Within the muscles, for example, there are special sensory spindle fibres that enable information to be sent back to the brain describing how far the muscle has been stretched. In the autonomic nervous system there are also many types of sensory systems that provide information about the internal state of physiological activity, such as the blood pressure within an artery, or the level of sugar in the blood. The arrows' return is also related to the inputs from our sense of sight, smell, hearing, taste, and touch, which supply our nervous system with a variety of information about the outside world. In this story, we are told that Rām's arrow returned from the seventh subterranean region.

On a cellular level, the return of Rām's arrows demonstrates that the nerve cell is capable of renewing itself so that impulses can go out again and again. This mechanism of renewal is present on the ionic level of the nerve, particularly within the nerve membranes. There are mechanisms whereby a membrane that has undergone depolarization or hyperpolarization can renew itself through an exchange of ions. This is an automatic homeostatic process constantly occurring throughout the physiology.

## Rām's Arrows Returning to the Quiver Feedback Loops of the Nervous System

Brain ↔ Spinal cord ↔ Nerves ↔ Muscles



**Figure 13.6** Nerve impulses activate the end organs of action (muscles, glands, blood vessels, etc.), resulting in sensory feedback to the brain as the basis for the next action.

The process of renewal described by the return of Rām's arrows is



everywhere, on all levels of creation—atomic, molecular, and cellular, as well as the levels of the organs and organ systems. We see it especially in Maharishi’s description of the sequential unfoldment of Veda and the Vedic Literature. As Veda unfolds from its source in self-referral consciousness, it is the expansionary quality, embodied in the aspect of the Vedic Literature known as Vyākaraṇ, that gives it its tendency to sequentially elongate itself, and it is the self-referral quality found in Nirukt, which ensures that it always stays connected to its source in *Ātmā*.

### ***Sarga 12–28: The Fight Between Rām and Vālī***

Rām and Sugrīva agreed on a plan to subdue Vālī. Sugrīva would first challenge Vālī to fight, and when Vālī arrived on the field Rām would kill him with an arrow shot from a hiding place. On the first attempt the plan was unsuccessful, because when Vālī and Sugrīva began fighting Rām could not distinguish between them. Rām’s difficulty arose because both Sugrīva and Vālī are part of the same structure, the pituitary gland. In a second encounter, however, the fight continued longer and Rām was able to kill Vālī.

Vālī always had the upper hand over Sugrīva, and indeed this hierarchy can be located physiologically. The pituitary stalk and portal system control secretions from the anterior pituitary gland. The anterior pituitary gland, however, also receives feedback inputs from hormonal activity throughout the physiology, which explains why we find Hanumān allying himself with Sugrīva.

When Rām wanted to subdue Vālī, he reached him first through Hanumān and then through Sugrīva. This describes the intimate connection between the hormonal system (Hanumān), the anterior pituitary gland (Sugrīva), the posterior pituitary and pituitary stalk (Vālī), and the central nervous system (Rām). This is the neuroendocrine axis, which contains a hierarchical system of control utilizing feedback loops. Feedback to the central nervous system comes from the hormones themselves as well as from the activity of the pituitary gland.



In the story, it is Sugrīva who attracted Rām to control Vālī: when the entire hormonal activity of the physiology is disturbed, the central nervous system is alerted in order to recreate balance. The required balance is assessed by the nervous system through the type of activity taking place in the pituitary gland, which explains why Rām goes through Sugrīva—the central nervous system must maintain awareness of pituitary gland activity while it is adjusting the controlling mechanisms that modulate pituitary function. It is said that the fight between Rām and Vālī was indirect, because Rām witnessed the conflict between Vālī and Sugrīva before sending the proper arrow, or input mechanism, to ‘adjust’ Vālī.

To summarize, Rām subdued Vālī, but in an unusual manner: he hid and watched both Vālī and Sugrīva, but initially did not shoot because he could not distinguish between them. In the second battle, Rām recognized Sugrīva, saw that he was weakening, and thus shot and wounded Vālī. Let us view these events from the physiological perspective, particularly with respect to the neuroendocrine axis. The brain monitors everything that is taking place in the physiology, which corresponds to Rām watching the fight; the pituitary stalk sends an inhibitory impulse to the anterior pituitary, which corresponds to Vālī subduing Sugrīva in the fight; the central nervous system then inhibits the inhibition of the pituitary stalk on the anterior pituitary, which is depicted by Rām attacking and subduing Vālī, freeing Sugrīva from Vālī’s influence.

Let us consider a simple analogy to describe the control mechanisms of the neuroendocrine system. Imagine that water is flowing through a garden hose and we compress the hose in order to inhibit the flow of water. If a friend then begins to press on our hand and weakens its muscles, our restriction of the water flow is, in effect, being inhibited by the friend, enabling the water to recommence flowing freely. The friend is inhibiting our inhibition in order to increase the amount of water flowing through the hose.

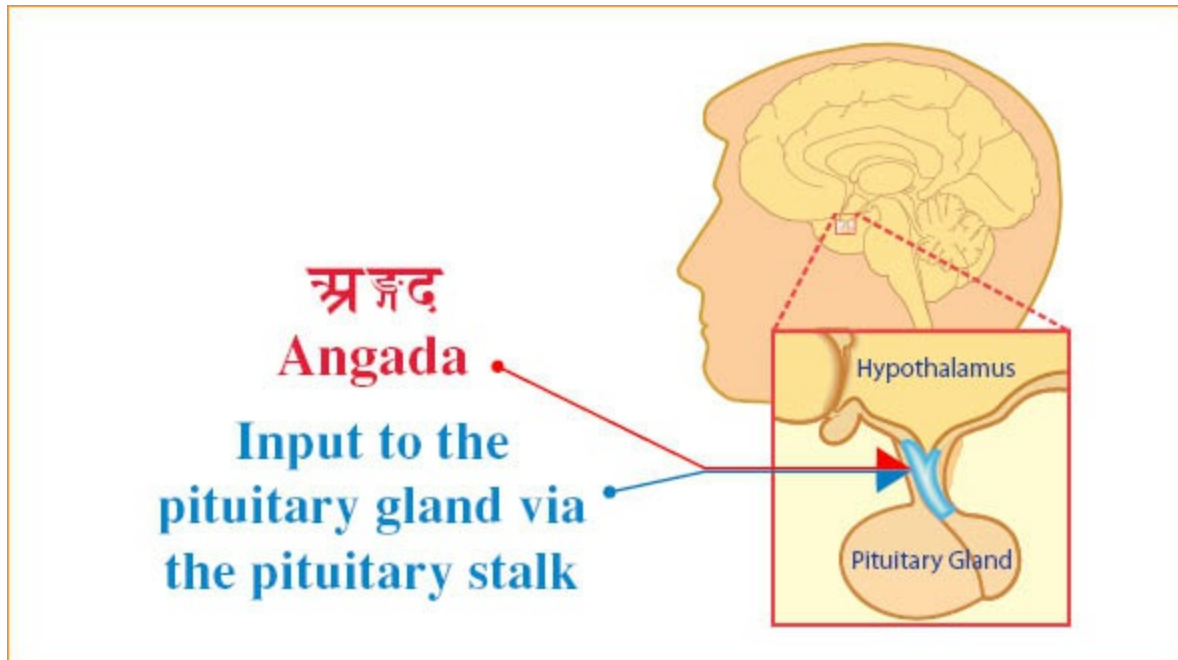
In the same way, Rām inhibited Vālī, who was inhibiting Sugrīva. During the fight, whom did Rām watch? He watched Sugrīva, and then he acted when he

saw Sugrīva weakening; Rām watched the level of inhibition and the level of activity and made his assessment, and was thus able to produce the most ideal effect.

It was also important for Rām to gain the full support of the *Vānara*, who would play a key role in Sītā's recovery. This corresponds to the requirement that hormones be engaged in order to maintain the body's nutrition and health. Hanumān, the most powerful *Vānara*, will lead the other *Vānara* to find Sītā and help Rām rescue her, and achieve victory over Rāvaṇ.

As he lay dying, Vālī objected to Rām's tactic, claiming that he had violated the rules of *Dharma* and behaved incorrectly by ambushing him. Rām countered by pointing out that Vālī committed an injustice by taking Sugrīva's *Patnī*, and for that he deserved to be punished. When one aspect of the physiology becomes imbalanced and overtakes the function of another, the nervous system must exert a balancing effect.

Hearing this explanation and realizing Rām's status, Vālī accepted defeat and surrendered to Rām, which describes how all pituitary activity comes under the brain's control. The neuroendocrine system is fully established in the rule of Rām, the rule of wholeness. In addition to surrendering to Rām, Vālī also asked Sugrīva to protect his son Angada. Pituitary control thus becomes correlated with Angada, and we will see later how Angada played a highly significant role in the battle against Rāvaṇ and his army of *Rākshasas*.



**Figure 13.7 Angada, the son of the *Vānara* chief Vālī, corresponds to the input to the pituitary gland via the pituitary stalk.**

Rām reassured Vālī at his death that he would take care of Angada. At the same time, Vālī surrendered his kingdom to Sugrīva, who in this way becomes the master gland exerting direct control over the hormonal system. On the transcendental level, which is the most fundamental level of Nature’s functioning, the surrender of the kingdom to Sugrīva is the surrender to Wholeness, to Rām.

It was necessary for Rām to subdue Vālī because Vālī represented an abnormal activity in this powerful area of the physiology. The pituitary is influenced by a number of areas in the brain that deal with instinct and self-protection, the activation of which can lead to aggressive and inappropriate behaviour, such as fighting and even war. The connection of these parts of the brain to the higher parts promotes a more enlightened style of physiological activity.

Maharishi’s Transcendental Meditation programme develops the awareness by enlivening connections between different parts of the brain. The

connections are enlivened between the higher cortical areas dealing with reason and the lower limbic areas dealing with aggressive behaviour. In phylogenetic terms, this refers to the evolution of higher parts of the brain in higher species, which provides mechanisms to control anger and aggression while promoting evolutionary action. Vālī became abnormal when he was disconnected from higher centres, and was motivated by areas of the physiology based more upon instinct. When these parts of the physiology connect with the higher parts of the brain, they automatically become subject to the higher goals of evolution.

The higher brain inspires and promotes evolution, balance, and behaviour in accord with *Dharma*. It also enables lower centres concerned with instinct to come into harmony with the evolutionary purpose of Natural Law, rather than merely promoting self-protection. A mind that is dominated by fear and separation can too easily move in the direction of conflict and war, and thus Rām taking over these instinctual areas provides them with the security of a higher purpose. Rām's arrows represent nerve impulses sent from his location in higher areas to different parts of the physiology, keeping them all connected to the holistic, evolutionary purpose of the physiology. Rām's arrows striking and killing Vālī describes the process of the higher areas taking control of the lower areas, and correcting their inappropriate actions. It is as if the endocrine system surrenders, saying that it does not want to live separately from the higher areas of the brain that Rām represents. By surrendering to Rām, Vālī made it possible for Sugrīva, Angada, Hanumān, and the other *Vānara* to fulfil their role in establishing order in the physiology, the divine rule of Rām Rāj.

Hanumān embodies the hormonal system of the physiology, and when he surrendered to Rām it established order and balance by controlling the different messengers. This order, however, was disrupted by the enmity between Sugrīva and Vālī. The messengers include all the hormones as well as local messengers within and between the cells, and are represented by all the different *Vānara* in the Rāmāyaṇ. Continuously performing their

functions, the messengers of the hormonal system circulate throughout the body—like the *Vānara* moving everywhere—awakening some aspects of the physiology, inhibiting others, and constantly passing messages from one part of the body to another.

The hormonal system has the capacity to achieve the holistic goals of the body if it remains fully connected with higher brain activity. If the connection becomes lost, imbalance will necessarily arise, and the physiology will not only become incapable of maintaining good health, but will cease its growth toward higher states of consciousness. The loss of the connection between the higher parts of the brain and the hormonal system adversely affects many functions, such as the activity of the heart and lungs as well as the regulation of blood pressure and physical growth. Indeed, all the diverse systems of the physiology are influenced by the hormonal system, and this is why Hanumān and the *Vānara* play such a vital role in the unfoldment of the Rāmāyaṇ.

### ***Sarga 29: Sugrīva's Delay***

In *sarga* 29, we find that Sugrīva had delayed in fulfilling his promise to help Rām locate Sītā. After the monsoon season had passed, Hanumān reminded Sugrīva of his promise, which represents feedback from the hormonal system to the pituitary gland. Sugrīva complied, and sent Nīla to assemble the *Vānara*. This represents a call by the pituitary gland for a holistic response from all of the circulating hormones in the body. In order for the pituitary gland, Sugrīva, to provide a full response, a certain level of feedback, via Hanumān, is necessary before the pituitary can release the correct amount of activating hormones.

Like a thermostat, the pituitary gland senses the hormone level of the body. If the level becomes too low, the pituitary gland orders an increase in the production and release of hormones; and when hormone levels are too high, the pituitary gland reacts appropriately to reduce them. Thus it is constantly adjusting the levels of hormones, maintaining them at an optimal level.

When Sugrīva delayed in his response to Rām's request, it was Hanumān who provided the feedback and reminded him of his duty. We also learn later that Sugrīva had set a specific time limit for gathering the *Vānara*, and this particularity of time represents the importance of cycles and timing within the hormonal system. The hormonal system is tightly regulated by diurnal and nocturnal rhythms as well as by environmental changes, such as the cycles of day and night, seasonal cycles, planetary cycles, etc. Indeed, the whole creation is regulated and precise, and it is for this reason that Sugrīva stipulated a specific time frame for the search.

As the king of the *Vānara*, Sugrīva can ask for anything, but his orders related to the cycles of time, namely the monsoon season, and to the request from Hanumān, the demands of the hormonal system. Hormones have their own cycles, and are sensitive to nature's greater cycles. For example, if blood is drawn from an individual in the middle of the night, the hormone melatonin will be very high, but if a sample is taken during the day melatonin will be very low. In the early morning there is an increase in certain hormones, such as growth hormones and cortisol.

### ***Sarga 30–31: Lakshmaṇ's Conversation with Sugrīva***

Rām was concerned about Sugrīva's delay, and sent Lakshmaṇ to find out why the search for Sītā had not begun. Lakshmaṇ wanted to kill Sugrīva for his apparent disobedience, but Rām told him to speak to Sugrīva in a conciliatory manner. Rām's perception of the reality of Sugrīva's delay is the response from the central nervous system to the pituitary gland—when the pituitary gland is either over- or underactive, one of the functions of the central nervous system is to adjust it.

When we are afraid of something, we manifest a specific set of physiological adaptations. For example, we may perspire, certain blood vessels constrict, the heart rate increases etc. Many of these changes or adjustments are under the control of hormones. Even though the hormones have their own internal



autonomic cycles and functions, input from the brain modulates these functions and guides them in the proper direction. In this *sarga*, we see that Rām's modulating effect is the activation of the pituitary gland, which the brain activates at different times and in different ways. This ensures that the adjustments the pituitary gland makes are in accordance with the higher levels of the body's intelligence.

In certain circumstances, however, the pituitary gland can function in a semiautonomous manner with its own timing and feedback loops, but ultimately it must coordinate its activity with the overall physiology. Rām, as the central nervous system, is responding to the overall needs of the physiology, to the holistic functioning of Natural Law with respect to the individual and to the environment, and is thus sending an input to Sugrīva, the hormonal system, to become activated.

Lakshmaṇ's desire to kill Sugrīva represents another potential response from the nervous system, involving the total inhibition and silencing of the pituitary gland. The central nervous system must often reduce or inhibit the activities of the hormones and their secretion. For example, hormones related to the daylight might become almost completely silent at night. Hormones related to the reproductive organs also have specific cycles of activation as well as periods of total inhibition.

When Lakshmaṇ asked Rām if he should, in effect, inhibit the pituitary gland permanently, Rām responded to the contrary, because the value of wholeness perceived the need to first determine what was taking place, and only then to give the most appropriate command. The nervous system needs the pituitary gland, Rām needed Sugrīva to search for Sītā. The nervous system wants to interact with the pituitary gland in the context of the current situation, which explains why Rām asked Lakshmaṇ to discuss the situation with Sugrīva, rather than merely inhibiting him.

Lakshmaṇ proceeded to Sugrīva's home, and after arriving he asked Angada to announce his arrival. Angada, as Vālī's son, represents input from the

pituitary stalk. This is a higher level of control over the pituitary gland, which explains why it is Angada who alerted Sugrīva of Lakshman's arrival. The input from the pituitary stalk activates, or awakens, the pituitary gland, alerting it to respond to messages coming from the central nervous system. At the same time, the pituitary gland must take into consideration what is occurring in the periphery. This is the reason that the *Vānara* and Sugrīva's ministers also play a role in Sugrīva's 'awakening'.

We learn at this point that Sugrīva was in a state of intoxication. This means that he was completely overtaken by hormonal inputs, and was overshadowed by the inputs from the periphery—he was not connected to the upper brain and the holistic requirements of the physiology, but was only responding to a partial aspect of his responsibilities. This describes the state of the pituitary gland when it is in a cycle of direct inhibition and excitation as a result of feedback derived solely from moment-to-moment physiological changes from the endocrine system. These changes could occur from reproductive hormones, metabolic hormones, or growth hormones. The flood of hormonal inputs was intoxicating and overshadowed Sugrīva.

Sugrīva is described as 'overwhelmed by desire and love', which describes how the pituitary gland can be overtaken by momentary sensations or pleasures while neglecting its duty to take care of the physiology. The central nervous system needs to awaken the pituitary gland to its duties, bringing it back in accordance not only with specific isolated values, but with the all-encompassing, holistic requirements of Natural Law. This is the role of Rām—to bring Sugrīva back to *Dharma*, back to proper action, which in this context is the role of the central nervous system in controlling the pituitary gland and endocrine system.

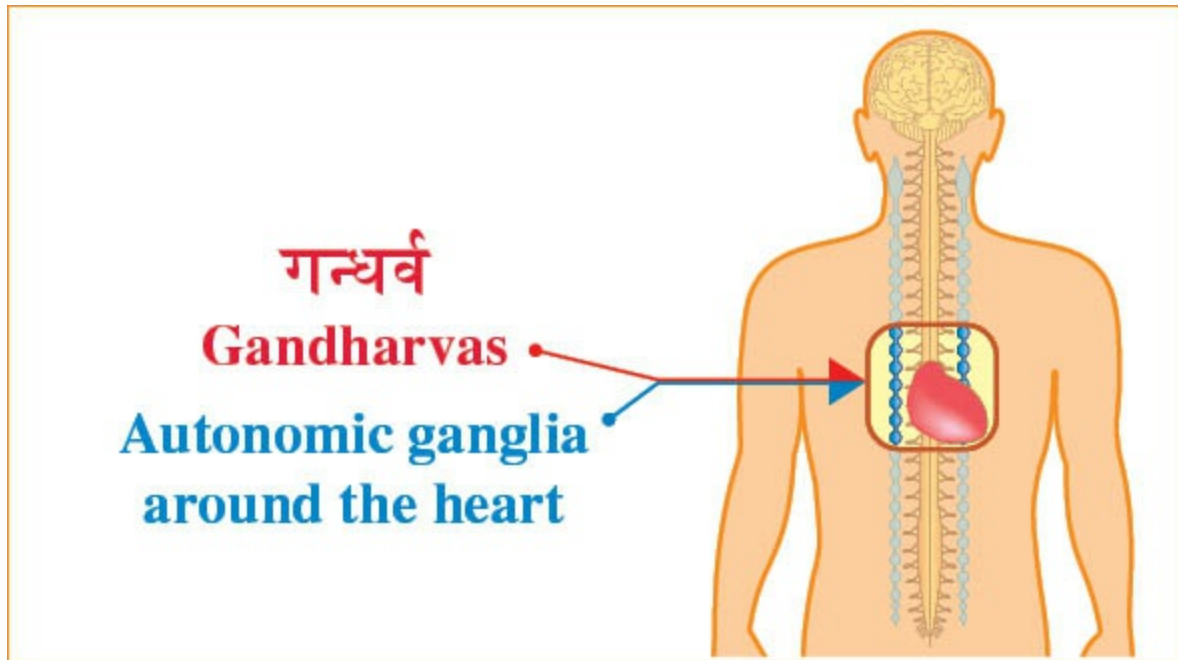
### ***Sarga 32: Hanumān's Reminder to Sugrīva to Begin the Search for Sītā***

Observing that Sugrīva was afraid of Lakshman's wrath, Hanumān explained to him that the cause of Lakshman's fury was his delay in honouring his

obligation to Rām. Hanumān’s advice was that he immediately submit to Lakshmaṇ. The pituitary gland awakens to its full responsibility by means of the different inputs that it receives, on one hand from the periphery—corresponding to the *Vānara*, chiefly Hanumān—and also from the central nervous system, represented here by Rām’s messenger, Lakshmaṇ.

### ***Sarga 33: Lakshmaṇ’s Arrival and His Meeting with Tārā***

Hanumān and Angada were ushered into Sugrīva’s palace to hear a musical invocation from various instruments. This reminds us of the *Gandharvas*, who represent the autonomic nervous system and control the rhythms of the heart. We also see that the autonomic nervous system can influence the endocrine system by itself. This illustrates how the totality of the autonomic and endocrine system is taken into consideration. The autonomic nervous system, in its role of controlling the functioning of the internal organs of the body by means of the nervous system, must maintain balance and attunement with the endocrine system, which manages the body through hormones secreted into the blood. When Lakshmaṇ met with Sugrīva and they began talking of music and chanting, it depicted an awakening on the level of sound—the reverberations of Natural Law. This is part of Sugrīva’s awakening, so that he will act in accord with the holistic value of Natural Law and finally begin the search for Sītā, as Rām had directed.

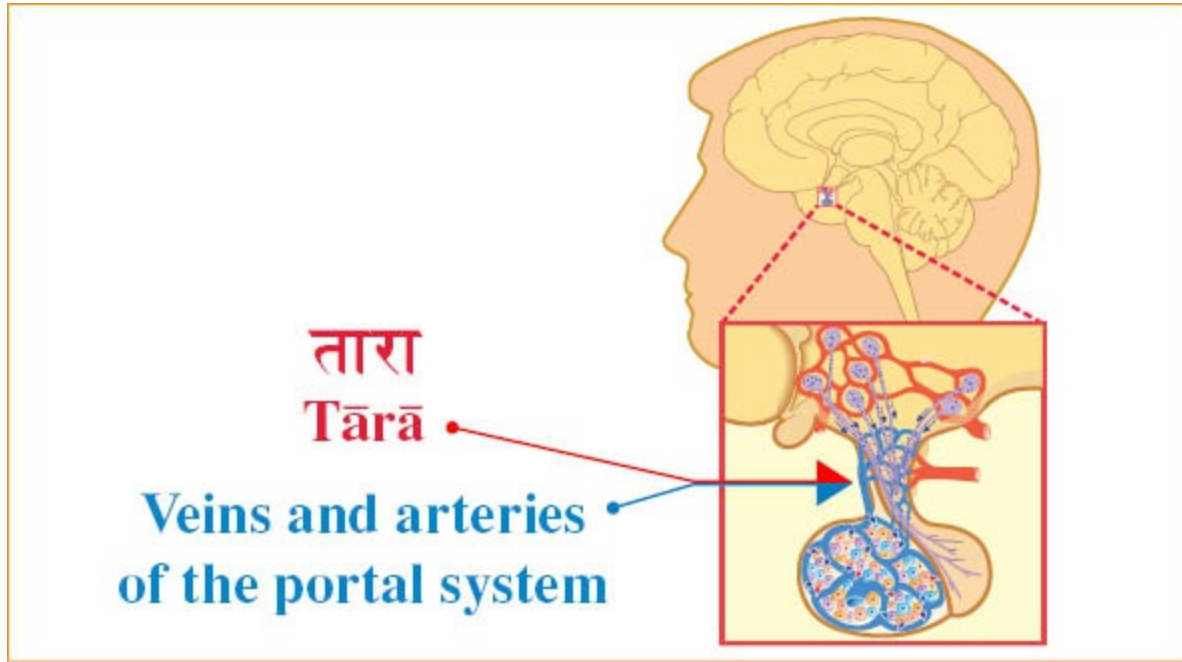


**Figure 13.8** The *Gandharvas* correspond to the autonomic ganglia around the heart.

We are told that in response to the invocation, Lakshman ‘twanged’ the string of his bow. We saw earlier how arrows represent nerve impulses, and how Rām’s bow represents the spinal cord and spinal nerves that spread throughout the physiology. When Lakshman pulled the string of the bow, he was creating nerve impulses to activate the pituitary gland.

Tārā, Sugrīva’s *Patnī*, asked Lakshman not to shoot Sugrīva with his arrows, explaining that she would act as the messenger and take responsibility for ensuring his response. Tārā corresponds to arteries and veins of the portal system, which convey messages to the pituitary gland, and her interaction with Lakshman precisely describes the mechanism by which activating factors are released in the portal system to awaken the pituitary gland. The chemical messengers secreted there are called neurohormones, and are different from either neurotransmitters or hormones. Neurotransmitters are secreted from the axons of nerve cells and travel across a tiny space called a synapse. Hormones are secretions from the glands into the blood, and neurohormones are secreted from the nerves, also into the blood. Both

hormones and neurohormones can travel long distances throughout the body. On Rām's order, Lakshmaṇ acted through Tārā to produce an effect on Sugrīva, which describes how the central nervous system, Rām, initiates action through Lakshmaṇ, who is also the central nervous system. This action results in the secretion of neurohormones that enter the blood in the portal system, Tārā. The portal system transports these neurohormones to the pituitary gland, Sugrīva, causing it to respond appropriately.



**Figure 13.9** Tārā, the *Patnī* of Sugrīva, corresponds to the veins and arteries of the pituitary portal system.

### ***Sarga 34–37: The Meeting Between Lakshmaṇ and Sugrīva***

This section describes the connection between the central nervous system and the pituitary gland. If the central nervous system does not send a sufficiently strong input to the pituitary gland, it will not become activated. Lakshmaṇ becoming enraged corresponds to the central nervous system at a high level of excitation.

At this point Tārā again intervened, explaining that Sugrīva had not yet acted because he was waiting for the *Vānara*—the hormones—to arrive, and he should therefore be pardoned for his delay. Sugrīva's delay thus represents the interval between hormonal input and the awakening of the pituitary gland.

Lakshman and Sugrīva apologized to each other and put aside their previous misunderstanding, which represents the ability of the central nervous system to balance any aspect of physiological activity. When two inputs come together, they can either clash and annihilate each other, or they can become integrated into a new state of cooperative functioning, resulting in a balanced physiological response. In this particular case, the input from the nervous system was balanced by the requirements of the periphery. Delays may occur because of some specific need in the periphery, which the nervous system takes into account so that it can then provide strong input for action. There must always be a balance between the specific and the general, between short-term and long-term plans.

When we want to achieve something, we need long-term goals, but at the same time we must also consider the short-term needs, such as proper meditation times, proper rest, exercise, food, etc. Problems arise when these daily elements of life become the entire purpose of activity and the long-term goal is forgotten. When Sugrīva became intoxicated, small peripheral values captured his attention, and he made excuses. Nonetheless, Rām perceived his devotion and encouraged him to move toward the higher, long-term goal. By going back to the Self and fulfilling the holistic goal of Natural Law, we open our awareness to the greatest possible objective—the unfoldment of perfection in life. At the same time, we must take care of our day-to-day requirements, such as our daily routine and the normal needs of the body. Balance fulfils both the internal homeostatic needs of the physiology, as well as the requirements of the central nervous system to grow and evolve through action and goals that are in accord with total Natural Law. Even when we recite a short prayer before eating, thanking the Creator for what He has given us, we are in effect saying, 'I am maintaining my physiology in order



to serve you properly and I thank you for what you have given me'. Even the small, daily needs must be included in the goal of reaching the highest level of enlightenment.

When an abnormality exists in the body that requires attention, both the central nervous system as well as the autonomic and endocrine systems must be in accord; each must agree on the process of correction. The neuroendocrine system will dispatch its hormones, factors, messengers, and cofactors to go to all parts of the physiology, locate the anomaly, and restore order to these parts. And all of this activity will be under the direction and rulership of the central nervous system. Thus, the area represented by Rām is always able to take into consideration the entire situation, and adjust and balance the inner requirements and needs with the overall goal of evolution.

### ***Sarga 38: Lakshmaṇ and Sugrīva Go to See Rām***

Once Lakshmaṇ and Sugrīva came to an agreement, they returned to Rām to inform him about what had transpired. Accordingly, the pituitary gland integrates input from the central nervous system via Lakshmaṇ, and then sends information back to the central nervous system. Rām, the central nervous system, is constantly informed through feedback mechanisms of the exact manner in which the many millions of the body's parts are fulfilling their allotted duties. He administers the central nervous system with all its hierarchical structures, and integrates the activities of the different systems, such as the autonomic nervous system, endocrine system, digestive system, etc.

In this we see a clear hierarchy of activity: the central nervous system, Rām, initiates a message, which is transmitted via the pituitary stalk, Angada. The message then goes through the portal system, Tārā, to the pituitary gland, Sugrīva. The pituitary gland first analyses, and then adjusts itself in order to respond appropriately to the message, while at the same time providing feedback to the higher levels of the nervous system. This is the physiological explanation for the passage in which Sugrīva and Lakshmaṇ returned to Rām

to explain what had taken place, so that Sugrīva could submit to Rām and inform him that the *Vānara* were gathering. This is the feedback loop from the pituitary gland to the central nervous system.

### ***Sarga 39–43: Sugrīva Commands the Vānara to Search for Sītā***

In this passage we learn of the arrival of countless *Vānara* and *Ṛiksha* (bear-like beings) from all over the land. This reflects the process of feedback—the entire ‘army’ of neurotransmitters, neurohormones, and hormones are now in tune with the total requirements of the physiology, both on the specific and holistic levels. At Rām’s request, Sugrīva then sent the *Vānara* in the four cardinal directions to search for Sītā, indicating that the hormones and messengers travel in all directions throughout the body. The hormones move through the bloodstream, correcting any small abnormality they encounter, which corresponds to the events that took place as the *Vānara* travelled in search of Sītā—their primary purpose was to find Sītā, but during their search they removed unwanted anomalies.

### ***Sarga 44: Rām Gives His Ring to Hanumān to Present to Sītā***

Rām perceived that the success of the search depended upon Hanumān, and he gave him his own ring to present to Sītā so that she would have confidence that Hanumān was indeed Rām’s messenger.

The ring is a three-dimensional structure, which corresponds to a three-dimensional protein marker on the surface of a cell that allows it to be recognized as ‘self’ or ‘non-self’. We have seen that during the development of the body, the immune system and other aspects of the physiology gradually come to clearly recognize what is either ‘self’ or ‘non-self’. ‘Self’ is recognized as a set of structures, or proteins, that are part of the state of the normal, optimal functioning of the body. ‘Non-self’ are those that have a marker, or structure, indicating that they do not belong—they are either

foreign material or are a cancerous or abnormal cell.

A marker may be a foreign material, bacterium, or even a cell that begins to malfunction. These are identified by the immune surveillance system, which is then able to attack and eliminate the foreign bodies or malfunctioning cells. Thus Rām, the wholeness of the central nervous system, gave Hanumān, his messenger, a specific marker that allowed him to be recognized as part of the holistic self. When Hanumān met Sītā, he gave her the marker so that she could distinguish him as part of the self, as opposed to a non-self structure. Rām's ring is a holistic aspect of Natural Law, representing the perception of the healthy self, and indicates that Rām is in tune with Natural Law.

### ***Sarga 45–46: Sugrīva's Knowledge of the Geography of the World***

In preparing to search for Sītā, Sugrīva gave detailed instructions for the *Vānara* to follow when they dispersed. Rām asked him how he knew geography so well, and Sugrīva explained that during his fight with Vālī he was chased throughout the entire world, thus becoming intimately familiar with its geography.

This sequence describes the activity of the anterior pituitary gland, which is under the control of the pituitary stalk. Inputs from the pituitary stalk system, where Vālī is located, excite and harass the anterior pituitary gland to secrete hormones into the circulating blood, which move to every cell through the circulatory system. They eventually return to the pituitary gland with information about cellular and physiological functioning, so that it can maintain the balance of hormonal secretion and activity.

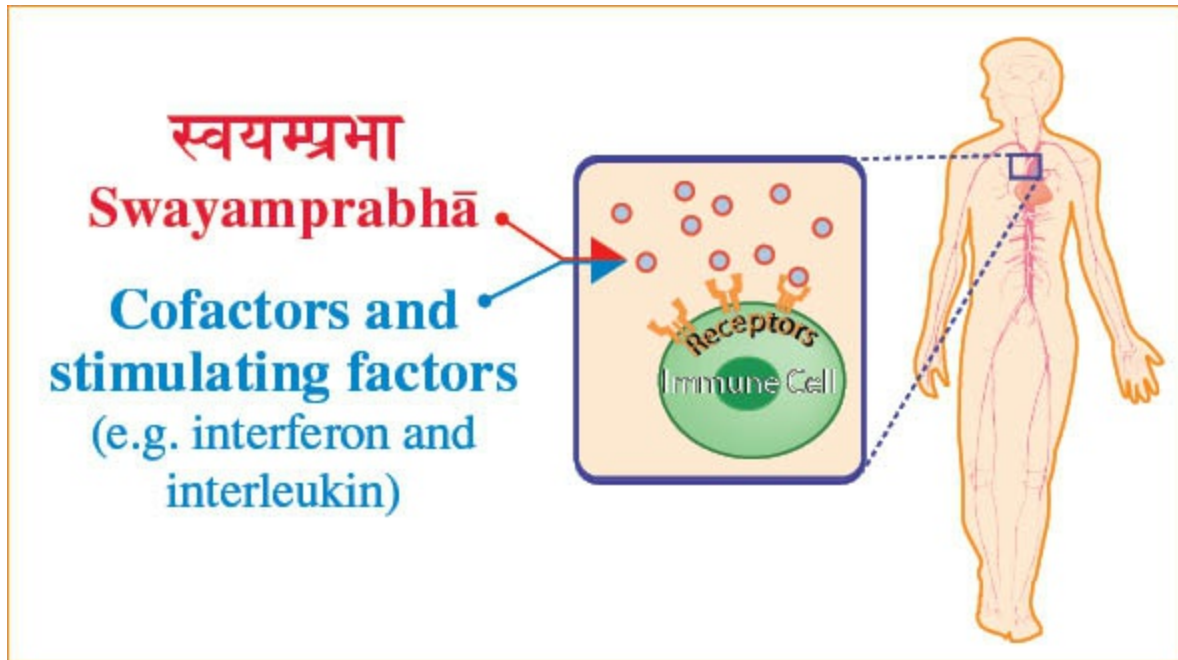
Every tissue receives oxygenation and nourishment from the blood, and it is through this oxygenated blood that the hormones travel everywhere. In this way, the pituitary gland is informed about the detailed geography of the entire physiology. The blood-brain barrier, however, inhibits entry into the brain, so even Sugrīva is not able to penetrate into Rām's area.

### ***Sarga 48–50: The Search for Sītā***

The *Vānara*, who had travelled throughout the four directions, returned and reported that they had been unable to find Sītā. They were certain, however, that Hanumān—the holistic value of the hormone system—would find her in the south. In their travels the *Vānara* encountered a number of difficulties, including a *Rākshasa* that Angada killed. These encounters are examples of normal interactions between the neuroimmune and neuroendocrine systems and bacterial infections, mutated cells, or the improper development of certain structures. Even while holding a more holistic goal (in this case the search for Sītā), the neuroendocrine and neuroimmune systems are involved in self-surveillance, destroying small anomalies, and creating balance and improved functioning, as their messengers move through the body. The destruction of Rāvaṇ, the greatest of all anomalies, will come later at the hand of Rām.

### ***Sarga 50–52: The Cave of Māyā***

While searching for water, Hanumān and Angada entered Māyā's cave, where they met Swayamprabhā, an ascetic woman. Swayamprabhā gave them food, fruit, and water, and helped them exit the cave when they found themselves temporarily trapped. Her aid corresponds to the various factors that help maintain the messengers of the hormonal and immune systems. These systems undergo many types of metabolic changes, and can malfunction or become weakened and fatigued, requiring maintenance, nourishment, and activation by various biochemical molecules. The immune system, for example, requires cofactors and stimulating factors, such as interferons and interleukins, to activate its cells.



**Figure 13.10 Swayamprabhā corresponds to the cofactors and stimulating factors of the immune system.**

Māyā's cave represents illusion, specifically the inability to distinguish 'self' from 'non-self'. This type of confusion can result in the immune system attacking healthy parts of the physiology, as in the case of autoimmune diseases. Swayamprabhā represents the mechanisms of sustenance and maintenance that are always nourishing, refreshing, and refurbishing the immune system in order to keep it in tune with wholeness, in tune with the Self, and which prevent it from being overtaken by illusion.

It is important to note the mechanism through which Swayamprabhā saved the *Vānara* from the cave, for it depicts the profound mechanics of Natural Law. The text tells us that she asked the *Vānara* to close their eyes and go back onto the Self:

निमीलयत चक्षूंषि सद्धर्मे द्वेद्यानरपुंगवद्वाः  
न हि निष्क्रमितुं शक्यमनिमीलितलोचनैः

*Nimīlayata chakshūṁshi sarve vānara-puṁgavāḥ  
na hi nishkramitum shakyaṁ animīlita-lochanaiḥ  
(Sundar Kāṇḍ, 52.27-28)*

*Close the eyes, all you Vānara, for it is not possible to exit the cave with open eyes.*

In other words, be self-referral, bring the awareness inside and don't be confused by outer objects. This programme of going back to the Self provides the principle of how immune cells utilize the information contained in the DNA, which is within themselves. 'Going back to the Self'—referring back to the DNA inherent within the cells—is critical for maintaining both the immune and hormonal systems.

### ***Sarga 53–55: The Debate Among the Vānara Leaders***

As Hanumān and Angada exited Māyā's cave, Angada realized that they had exceeded the time limit set by Sugrīva. He suggested that they all fast until death rather than be killed by Sugrīva for disobeying orders. One of the *Vānara* generals then proposed that they go back into Māyā's cave to hide, but Hanumān responded that they must return to *Kishkindhā* and report to Sugrīva. The *Vānara* were all despondent, and debated how to behave in light of their failure.

Timing is critical for the proper functioning of hormones, because they must be secreted at a specific rate and at a specific concentration at different times of the day and night. Even the immune system is very delicately connected to specific cycles. It is well understood that certain medications act most efficiently at specific times of the day, and are less effective at others.



Cyclicality is therefore very important, and hormones and cells circulating in the physiology must be in tune with the cycles and timings of the metabolic processes, in tune with the cycles of Natural Law. If the cells and hormones do not achieve their goals within a specific timeframe, they will be naturally eliminated, because the effective period of their action cycle will be over.

One type of activity suggested by Angada was fasting. Fasting in this context means returning to the Self, refusing to take in anything from the outside. This occurs at a point in the story when the hormonal and immune systems both require greater strength, confidence, and a well-identified target. Otherwise, they would need to return to the central master gland, the pituitary gland, which could secrete hormones that might inhibit or even destroy them. Returning to the Self and fasting is an intelligent response to their inability to achieve their goal. When the goal is not in sight, the most effective reaction always is to go back to the larger, inner Self, and draw energy from it.

Hanumān suggested returning home, which corresponds to going back to the holistic value of the hormonal and immune systems. Hanumān is reminding the messengers of the necessity for feedback, because without feedback there can be no proper ‘feed forward’, with an appropriate reaction to the situation. The messengers have come far from home, far from their original glands and their original secretions, and so they see two possibilities: on one hand, their requirement is to be self-referral and inwardly directed, but they also feel to return home to gather further strength and information so that they can proceed in their endeavour.

Ultimately the two options are the same. A return to Sugrīva is really a return to Rām, who is controlling Sugrīva and guiding the search. Physiologically, this feedback process takes place all the time. After circulating within the blood, hormones return to the pituitary gland and inform it about what they have achieved, while also indicating further physiological requirements needing attention.

### ***Sarga 56–63: The Meeting with Sampāti***

These *sarga* unfold a conversation between the vulture king Sampāti, Jatāyu’s elder brother, and the *Vānara*. When he first noticed the *Vānara* sitting together, Sampāti considered them cautiously, hoping to eat them. However, he overheard Angada recounting Rām’s plight, his description of the trials the *Vānara* had undergone, and also the story of the death of Dasharath. Angada also mentioned the righteousness of Jatāyu, who had laid down his life in Rām’s service. Bewildered by Angada’s speech, Sampāti requested further details about his brother’s death, and that of his friend King Dasharath. Angada then asked the *Vānara* to help Sampāti descend from the mountain, as he had lost his wings many years before. Angada related to Sampāti the story of Jatāyu’s attempt to save Sītā from Rāvaṇ, and how the *Vānara* had been unsuccessfully searching for her.

After being carried down from the mountain, Sampāti explained that his wings had been burnt away while he was protecting Jatāyu from the Sun. Angada then asked Sampāti if he knew where Sītā had been taken. Using his special visual abilities, Sampāti was able to see Rāvaṇ and Sītā 100 *yojanas*<sup>1</sup> away in Lankā.

Sampāti asked the *Vānara* to take him to the ocean, so that he could offer an oblation to Jatāyu’s soul. After his offerings, he revealed that his son, Supārshwa, had encountered Rāvaṇ as he was carrying Sītā to Lankā. He also told the *Vānara* that Ṛishi Nishākar had predicted that his wings would be restored when he met the *Vānara* and helped Rām find Sītā. Even as Sampāti was telling the story, a pair of beautiful wings emerged from his sides. Reassuring the *Vānara* that their purpose would be accomplished, he flew away.

In our discussion of *sarga* 14 of *Āraṇya Kāṇḍ*, we saw that Sampāti corresponds to a fixed carrier protein on the cell surface, which enables molecules to cross the cell membrane. These fixed carrier proteins also contain receptors that enable them to detect certain biochemicals. This corresponds to Sampāti’s ability to see very far—when a cell detects a certain

level of messengers circulating in the blood, it is in effect detecting what is taking place at a far distance in the body.

In addition, there are many organs, such as the thyroid gland and pancreas, which secrete hormones into the blood that circulate throughout the body. These hormones act as messages, which are detected by fixed protein receptors on the cells of different tissues. This gives the ability to know what is taking place anywhere in the body—it is as if the cell can look anywhere. This capacity is precisely described by Sampāti's ability to see far in the distance.

The restoration of Sampāti's burnt wings represents configuration changes that the protein receptors undergo. When the fixed protein gate, or receptor, responds to an incoming message, its configuration can change and its ability to function may be temporarily halted. The change in the configuration of the fixed protein corresponds to the physical change Sampāti underwent when both his wings were burnt away by the Sun.

It is interesting that Sampāti wanted to eat the *Vānara* when he first observed them, because this is what a receptor naturally does to the messenger molecules. When messengers are circulating in the blood, their natural duty, or *Dharma*, is to be taken up by the fixed protein receptor. The messenger, however, is not necessarily 'eaten' or destroyed by the receptor, but merely held in order for an effect to be produced.

The receptor and the messenger work together like a lock and key. We place a key in a lock, turn the key, and the door opens. Sampāti represents a type of lock that has a keyhole, or receptor, as part of its structure. This receptor allows Sampāti to detect all kinds of molecules (or keys), which may come from some distance. These molecules may or may not fit into the lock's keyhole, and when they do fit they may be changed or even destroyed by the interaction.

Sampāti's initial impulse to eat the messengers might correspond to an

interaction that would destroy them, but instead of eating the *Vānara* he spoke with them and discovered his brother's fate, after which he helped them locate Sītā. Once he realized their importance, he engaged in a different type of interaction with them, and in this case it was the receptor rather than the messenger that underwent a transformation, or configuration change, as depicted by Sampāti's regeneration of his wings. The transformation occurs when the receptor recognizes the appropriate message, which in this case is a message from Rām.

When the *Vānara* connected with Sampāti, he changed his configuration and produced an effect. But first he asked the *Vānara* to take him to the ocean so that he could perform an oblation for Jatāyu. This corresponds to the opening of pores on the cell surface to allow fluids to move in. The ocean corresponds to bodily fluids that are the medium of action for the relationship between receptor and messenger, and also for the resulting function produced by the receptor. These changes of configuration of the fixed protein represent the change in Sampāti's structure.

### ***Sarga 64–67: Hanumān's Flight to Lankā***

In *sarga* 64, Angada enquired if any of the assembled *Vānara* could cross the ocean to Lankā, and all concurred that only Hanumān would be capable of performing such a feat. These *sarga* present the mechanics of Hanumān's preparation and the outset of his journey to Lankā, which we will examine in some detail as they accurately describe the mechanics of Maharishi's TM-Sidhi programme, particularly the technique of Yogic Flying.

### **Maharishi's TM-Sidhi Programme**

*Siddhi* means 'perfection' in the Vedic Language, and the purpose of Maharishi's TM-Sidhi programme is to unfold perfection in life through the development of higher states of consciousness. We saw in Chapter I that Maharishi's Transcendental Meditation enables us to directly experience the

infinite field of pure Being that lies within each of us—the Pure Intelligence deep within that is not only the source of our own creativity and intelligence, but also the total potential of Nature’s functioning. The TM-Sidhi programme is an advanced aspect of Transcendental Meditation that trains an individual to think and act from the level of Transcendental Consciousness, greatly enhancing coordination between mind and body, and spontaneously developing the ability to enliven Natural Law to support the fulfilment of desires in all avenues of life.

### **Hanumān’s Practice of Yogic Flying**

Maharishi emphasizes that *Sidhi* performance is based upon one’s ability to function from the level of pure consciousness. Thus as preparation for Yogic Flying, one sits and meditates for some time in order to establish the awareness in the silent field of pure Being. Prior to Hanumān’s flight to Lankā, we find these same mechanics: Hanumān first prepared himself by sitting quietly with his awareness absorbed in pure, self-referral consciousness, his own Self:

ततः प्रतीतं प्लवङ्गतां द्व्यरिष्ठमेकान्तमाश्रित्य सुखोपद्विद्यष्टं  
संचोदयामास हरिप्रद्वद्यीरो हरिप्रद्वद्यीरं हनुमन्तमेद्वद्य

*Tataḥ pratītaṁ plavatām varishtham ekāntam āshritya sukhopavishtam  
saṁchodayāmāsa haripravīro haripravīraṁ Hanumantam eva  
(Kishkindhā Kāṇḍ, 65.35)*

*Then the heroic Jambavān sent for that best among Vānara, the wise  
Hanumān, who was sitting blissfully, absorbed in Unity, having turned  
within.*

Maharishi further explains that correct practice of the TM-Sidhi programme involves a *Sankalpa*, which we described in Chapter VI as a desire or

intention. When one is instructed in Yogic Flying, one learns how to properly employ the *Sankalpa* in order to fulfil the desire to fly through the air. In the final *sarga* of *Kishkindhā Kāṇḍ*, we find that Hanumān first brought his awareness back to his own inner Self, and then employed the *Sankalpa* in order to cross the ocean to Lankā:

मनः समाधाय महानुभाद्वद्यो जगाम लङ्कां मनसा मनस्वद्यौ

*Manah samādhāya mahānubhāvo jagāma  
lankām manasā manaswī*

*(Kishkindhā Kāṇḍ, 67.49)*

*The intelligent and mighty Hanumān, establishing his awareness in  
Samādhi, pure intelligence, went to Lankā by means of his intention.*

The principal component of the TM-Sidhi programme is *Sanyama*, which involves bringing the awareness back to the Self—returning to unbounded awareness, *Samādhi*. Through correct practice, the repeated ‘returning’ to the Self allows *Sanyama* to occur spontaneously and effortlessly, thus enabling one to fulfil one’s desires.

Maharishi locates this principle in the Bhagavad-Gītā, a central aspect of the Vedic Literature, in which Lord Kṛishṇa, the embodiment of *Brahm*, describes his own self-referral performance:



प्रकृतिं रूढयामद्वद्यष्टभ्य द्विद्यसृजामि पुनः पुनः

*Prakṛitiṁ swām avashtabhya visṛijāmi punaḥ punaḥ*  
(*Bhagavad-Gītā*, 9.8)

*Curving back upon My own Nature (Self-referral consciousness—  
Transcendental Consciousness), I create again and again.*

Maharishi explained that Hanumān's success was the result of his repeatedly bringing his awareness back to Rām, the self-referral field of Wholeness, *Ātmā*. Maharishi cited the description in Tulsīdās' *Rām Charit Mānasa* as an example of Hanumān's *Sidhi* performance:

बार बार रघुबीर सँभारी

*Bār bār Raghubīr sambhārī*  
(*Rām Charit Mānasa*, *Sundar Kāṇḍ* 2.3)

*Remembering Raghubīr (Rām) again and again...*

Hanumān had Rām in his heart, and continually went back to Rām while holding the intention to go to Lankā. Having Rām in his heart means that he was established in the Self, in Wholeness. This is the procedure that Maharishi described for those practising the TM-Sidhi programme, the technique for achieving anything.

It is interesting to note that there are several references to Hanumān being 'like Viṣṇu' in the context of his journey to Lankā. These expressions beautifully describe the requirement of practising Yogic Flying from the level of self-referral consciousness, which we have seen is the reality of Viṣṇu. For example, prior to his departure Hanumān noted that

भद्विद्यष्यति हि मे रूपं प्लव्द्यमानस्य सागरम्  
द्विद्यषोः प्रक्रममाणस्य पुरा त्रीन्द्रियक्रमानिद्वद्य

*Bhavishyati hi me rūpaṁ plavamānasya sāgaram  
Vishṇoḥ prakramamāṇasya purā trīn vikramān iva  
(Kishkindhā Kāṇḍ, 67.25)*

*My awareness while crossing the ocean will be like Vishṇu, who in  
ancient times took three strides.*

This is a reference to Vishṇu's fifth incarnation as Vāman the dwarf, who defeated the *Asura* (demon) emperor Bali. Vāman asked Bali to give him as much ground as he could pace out in three steps. When granted the request, Vāman grew to an enormous size and circled all of Heaven, Earth, and the lower regions in his three strides. By referring to Vishṇu and his incarnation as Vāman, Hanumān was acknowledging that his own inner awareness would be that of Vishṇu, the pure, self-referral intelligence underlying all creation, and on that basis he would travel to Lankā.

### ***Footnotes***

1. One *yojana* is approximately 13–16 km.



# Chapter XIV

## *Sundar Kāṇḍ*

### ***Sarga 1: Hanumān Encounters Surasā and Simhikā***

**S***undar* means ‘beautiful’, and in the *Sundar Kāṇḍ* we find Hanumān flying to Lankā, searching for Sītā, and eventually locating her in an Ashok grove near Rāvaṇ’s palace. The chapter begins with Hanumān’s journey, which, as we discussed in the last chapter, beautifully displays the Vedic Technology of Yogic Flying. Hanumān began with the simple intention of arriving in Lankā, and then by holding Rām in his heart—by going back to the Self again and again—he flew across the ocean.

Hanumān fulfilled several key roles in Rām’s service. At this point in the narrative, Hanumān’s mission was to cross the ocean to Lankā, which is the physiological equivalent of hormones being secreted into the bloodstream and traversing long distances. These hormones move so rapidly that they ‘fly’ within the blood and bodily fluids, easily able to traverse the extremities of the body.

Hormones have the ability to expand, yet also to contract and become minute, and are able to penetrate even the tiniest areas of the physiology. They go everywhere based upon the needs of the body, which corresponds to Hanumān’s performance: he flew wherever he was needed, always thinking of Rām, always purposefully connected to Wholeness. In several cases we find Hanumān expanding and contracting according to the need of the situation.

This story is a wonderful illustration of the feedback loops that are an inherent part of the neuroendocrine system. In this episode Hanumān had two functions: he performed specific tasks, such as killing *Rākshasas*, and he brought information back to Rām. In the same way, hormones circulate throughout the physiology in order to create specific effects. Their level in

the blood enables them to convey information back to the gland from which they were secreted as well as to higher levels of control. This enables the body to maintain proper levels of hormones everywhere so that the hormones can achieve their goals.

During Hanumān's flight to Lankā, a large serpent named Surasā, the mother of serpents, reached high out of the ocean and opened her jaws in an attempt to swallow him. Hanumān made himself increasingly large, but Surasā continued to make her mouth even bigger. Finally Hanumān became extremely small and entered her mouth in order to pass through her.

Surasā can be understood from a subtle as well as a more expressed level. Surasā's subtle level describes the ability of the DNA to regulate the production and secretion of hormones or neurotransmitters. Her gross level corresponds to the same principle of regulation, only on the cellular level.

It is interesting to note that both DNA and neurons resemble serpent-shaped structures. DNA is similar to two long strings wound together to form a double helix. During certain activities, however, the strings unwind and the DNA as if 'opens its mouth'. The two strings of DNA continue to open and become attached to various messengers. Once the messengers have completed their task, the DNA either releases them or allows them to be destroyed. This is exactly what happened in Hanumān's encounter with Surasā: he became very large while Surasā became larger, and then he became minute, entering her mouth in order to pass through.

Surasā once received a boon from Brahmā, which stipulated that no one could pass by her without first entering her mouth. The requirement of this boon is very interesting because we know that Brahmā represents Veda or Total Knowledge, and Veda, which is present in DNA, contains complete knowledge of the physiology. The total Natural Law that creates every aspect of the physiology is present in the DNA, and it is the DNA that controls the production and release of enzymes, which produce hormones, neurotransmitters, and all chemical messengers. So ultimately the

accumulation and quantity of all hormones and neurotransmitters within the cell is controlled by DNA, and is based upon the requirements of the body.

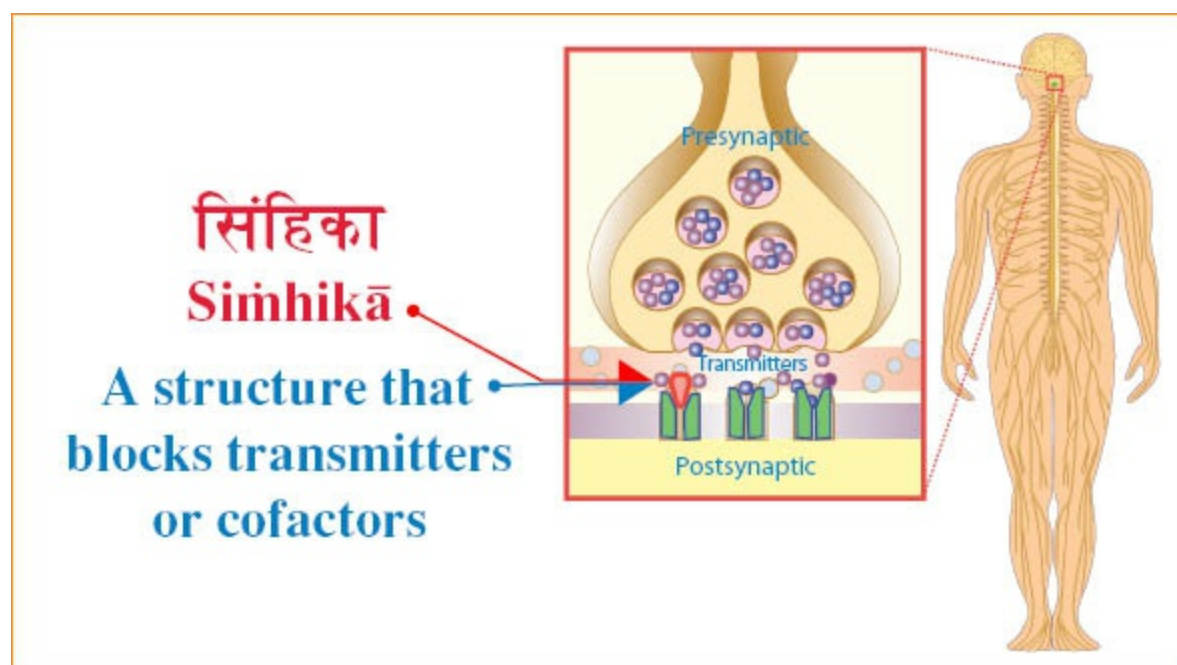
In order for a hormone or neurotransmitter to be released, it must first reach a critical level of concentration or volume, so that it is capable of performing its task—too few hormones cannot produce the desired effect. The *Vānara* represent the hormones or messengers. On the level of DNA, Surasā's steady increase in size represents the DNA checking to see if the quantity of hormones is enough on the cellular level to produce an effect. When Hanumān became larger, she was conveying to him that he must become even larger. As she opened her mouth wider, Hanumān responded by becoming even larger. This represents the buildup of hormones or neurotransmitters in response to the demands of a cell or neuron, until a specific, critical level is reached such that the hormones or neurotransmitters are released either into the bloodstream or the synaptic gap.

This checking mechanism is inherent in the physiology on the level of both DNA and the cells. First there is a requirement for expansion, and then the expansion must reach a critical level. There is a critical point, however, at which it is not necessary for the hormones or neurotransmitter to become larger. Hanumān had to comply with Brahmā's boon, which required that no one could pass Surasā without going through her mouth. Therefore he became very small and went through her mouth without a problem.

Continuing his flight to Lankā, Hanumān was confronted by a *Rākshasī* (female *Rākshasa*) named Simhikā, who was accustomed to catching flying birds by seizing their shadow. As Simhikā grasped Hanumān's shadow and pulled it towards her, he again expanded in size. She responded by distending her mouth to match his size. Contracting himself he fell into her mouth and destroyed her.

A *Rākshasa* in the Rāmāyaṇ always corresponds to either a diseased part of the physiology or a cell or group of abnormal cells, such as a tumour. We understand Simhikā therefore to be a diseased process that blocks or inhibits

different hormones, transmitters, or cofactors.



**Figure 14.1 The *Rākshasī* Simhikā corresponds to a structure that blocks transmitters or cofactors.**

The birds Simhikā used to swallow represent tiny transmitters, enzymes, or co-factors that are vulnerable to outside agents. Just as Simhikā was able to swallow the birds by examining their shapes through their shadows, the structures that destroy these circulating molecules identify them based on their three-dimensional shape. The three-dimensional configuration of a particular protein or molecule allows another molecule to recognize it and in some cases block or destroy it. Simhikā was able to block or destroy certain molecules that are useful in the body, but Hanumān, corresponding to the holistic value of the hormonal system, is a part of the immune surveillance system whose role it is to clear the physiology of foreign and harmful material. He represents humoral immunity via immunoglobulins, etc., and the neuroendocrine control of the immune system. The physiology is constantly being bombarded by bacteria and viruses even when it is perfectly healthy, and the ability to overcome them depends upon the strength of the immune surveillance system.



Modern medicines may block or inhibit hormones or transmitters in order to create a desired effect. For example, in some diseases a drug might be employed to block or destroy enzymes or hormones that are over-secreted. It is as if a doctor were to place Simhikā in the body in order to swallow and absorb a certain amount of abnormal secretions—‘passing birds’. We know, however, that modern medicines create many unwanted side effects. When the body is strong it is able to overcome these side effects and bring the physiology back to normality. Guided by the wholeness of the physiology, by Rām, Hanumān was able to remove abnormalities, for he possesses the ability to counteract and destroy disease processes.

The body’s inner defence mechanisms, such as the immune system, are naturally activated by hormones that circulate throughout the physiology, counteracting various negative influences. These influences may arise from improper food, from the harmful side effects of medicine, or even from diseased parts of the physiology that are producing the wrong messengers. When the higher brain activities corresponding to Rām are properly connected with the homeostatic mechanisms of the neuroendocrine system, negative influences can be counteracted, and the entire physiology gains the ability to inhibit disease.

Hormones, antibodies, and other agents employed by the immune system act by attaching themselves to specific receptors, which they are then able to modify. This causes changes that can lead to the destruction of the bacteria or abnormal cell either directly or indirectly through the stimulation of other defence mechanisms. This is again similar to the description of Hanumān’s attack and destruction of Simhikā. Hanumān’s activities and battles can be seen to represent different components of a healing process taking place. The fulfilment of this process unfolds in the final *Kāṇḍa* with the destruction of Rāvaṇ and all the *Rākshasas*, and the re-establishment of Ayodhyā, which refers to the complete elimination of any disease states in the physiology and the restoration of perfect balance, perfect health.

## ***Sarga 2–14: Hanumān Enters the City of Lankā***

The Rāmāyaṇ recounts how Hanumān entered Lankā by shrinking to the size of a cat. By contracting to this form he is showing the ability of hormones and messengers to interact with the receptors on cells that open gates and pores. Once Hanumān entered the city, he met a *Rākshasī* who was the guardian of Lankā. Lankā itself corresponds to a diseased state, and when Hanumān arrived he was confronted by a barrier at the entrance. On a cellular level, this *Rākshasī* represents the maintainer of the internal structural integrity of an anomalous or diseased cell. An anomalous cell has its own protective mechanisms on its surface—otherwise it would be naturally destroyed by the body. The cells that are involved in most difficult diseases or tumours often have very powerful protective mechanisms both on their surfaces and within. The protective mechanisms within the cell may be in the form of enzymes that are capable of destroying any messengers or converting them into another form.

The *Rākshasī* first tried to repel Hanumān and prevent him from exploring the city. However, when he overcame her she asked him to spare her. Then she revealed Brahmā's prophesy that there would come a time when a *Vānara* would subdue her, and that the destruction of the *Rākshasa* civilization would be imminent. Realizing that the time had come, the *Rākshasī* invited Hanumān into Lankā, giving voice to what has since become a famous expression, often repeated at the outset of travel:

प्रबिसि नगर कीजे सब काजा  
हृदयँ राखि कोसलपुर राजा

*Prabisi nagar kīje sab kājā*  
*hṛidayam rākhi Kosalpur Rājā*  
(*Rām Charit Mānasa, Sundar Kāṇḍ 6.1*)

*Enter the city with the Lord of Ayodhyā enshrined in your heart, and*

*fulfil your given task.*

When an abnormal cell, such as a cancer cell, meets a messenger able to overcome its defence mechanisms and activity, it is doomed and will be destroyed. When immune cells interact with cancer cells and a specific antigen-antibody reaction takes place, the cancer cell is immediately marked as abnormal. Once the cell is marked it will be attacked by other cells and factors through various means. For example, it may be attacked through the activation of catabolic enzymes that are able to overcome the cell's defence mechanisms. This is what transpired when Hanumān subdued the *Rākshasī* and entered Lankā—in effect he marked the city for destruction, and the *Rākshasī* knew that the end was at hand.

### ***Sarga 15–37: Hanumān's Message to Sītā***

When Hanumān reached Lankā, he located Sītā and delivered a message from Rām. Hormones, as we have said, carry messages over long distances, passing through all the different fluids of the body. They can also pass through very small channels and the pores within cells, creating powerful effects such as increasing or decreasing the metabolism and the promotion or inhibition of the growth of various tissues.

Messengers have the unique ability to identify their target cells by recognizing protein receptors and markers on the cells' surface. This is part of the learning process of self-recognition that takes place when immune cells mature and learn to distinguish between 'self' and 'non-self'. In the Rāmāyaṇ these protein receptors and markers correspond to Sītā's jewellery, which enabled Hanumān to recognize her. When Hanumān left Kishkindhā to search for Sītā, Rām described some of the jewellery that he had given her before they left Ayodhyā, and this description enabled Hanumān to identify her while she was imprisoned in the Ashok grove in Lankā. And we also know that Rām gave his own ring to Hanumān to present to Sītā to give her confidence that he was Rām's representative. The ornaments, jewels, or rings all represent the three-dimensional structures of the protein receptors, or

markers.<sup>1</sup>

### ***Sarga 38–40: Sītā’s Story of the Crow***

Hanumān asked Sītā for a token to take back to Rām as proof that he had spoken with her, and she related a private memory of an interaction she and Rām had with a crow at their *Āshram* near Chitrakūt mountain. A hungry crow had begun pecking at her, drawing blood and making her cry. Rām embraced and comforted her, but the crow continued to bother her, angering Rām. Plucking a blade of grass, Rām charged it with the potency of an *Astra* (a sacred missile) presided over by Brahmā, and hurled it at the crow. The crow tried frantically to escape, flying very fast and over enormous distances, but the missile followed it wherever it flew in the universe. Finally the crow returned to Rām to beg forgiveness. In order to neutralize the missile and spare the crow’s life Rām had to destroy one of the crow’s eyes.

The circulation of the blood that nourishes the central nervous system never fully reaches certain cortical areas in the most distal part of the perfusion territory of the main cerebral arteries. These regions are called ‘watershed’, or border zone areas, as they lie at the border between two perfusion territories. They are very sensitive to hypoperfusion and ischemia, and depend to some extent upon the diffusion of plasma and nutrients through the tissues, rather than the usual direct nourishment of the blood coming from the vessels.

In these parts of the physiology, the vessels or arteries are denuded from their protective mechanisms and as a result there is a certain amount of highly controlled leakage that allows the fluid to penetrate to these deep areas of the brain. Sītā’s bleeding wound, together with her flowing tears, point to this situation of ‘leakage’ with clear plasma fluid diffusing from the blood vessels to these watershed (border zone) areas. The fact that Hanumān heard this story rather than experiencing it directly is also consistent with this particular association, because the story focuses on a hidden or secret place, describing a location that the general circulation does not reach.

## ***Sarga 41–48: The Destruction of Rāvaṇ's Garden and the Binding of Hanumān by Indrajit's Arrow***

After delivering Rām's message, Hanumān prostrated before Sītā and took his leave. Before departing Lankā, however, he felt the need to collect more information for Rām by assessing the strength of Rāvaṇ's army. He also wanted to make Rāvaṇ aware of the strength of the *Vānara* army. Hanumān knew that the garden where he met with Sītā was one of Rāvaṇ's favourite locations and he hoped to provoke Rāvaṇ by destroying it. He thus proceeded to tear apart the *Ashok-vanikā*, the Ashok garden.

When Rāvaṇ heard that Hanumān was destroying his garden, he sent a large army of *Rākshasas* to kill him, but Hanumān easily dispatched them. Rāvaṇ then sent more armies under the command of his ministers' sons, but Hanumān vanquished them as well. Next Rāvaṇ sent his son Aksha, whom Hanumān killed, and finally Rāvaṇ summoned another son named Indrajit who was well versed in magical powers and who had in the past vanquished Indra himself (*Indrajit* literally means 'one who has conquered Indra'). A long battle ensued between Indrajit and Hanumān.

Indrajit became frustrated when his arrows had no effect on Hanumān, so he invoked an *Astra* presided over by Brahmā, which had the power to bind. Out of respect for Brahmā, Hanumān allowed himself to be bound, remembering that he too had obtained a boon from Brahmā that would protect him. Hanumān was rendered briefly unconscious, but when he awoke he pretended to remain bound, hoping that Indrajit would bring him before Rāvaṇ.

Hanumān, as we have seen, corresponds to all the messengers and hormones in the body. In order for a messenger to penetrate a cell it is usually bound first to a protein receptor on the cell's surface. The messenger then recognizes a specific site upon the cell known as the receptor area, approaches it, and creates changes in the receptor's structure or function. These changes can be seen as a disruption of the usual three-dimensional configuration of the receptor, corresponding to the disruption that Hanumān

created in the Ashok garden. Once the messenger fits into the receptor, this initial interaction may lead to further interactions, such as the release of a second messenger inside the cell. All these processes ensure that the proper message is delivered, either directly or indirectly.

The fact that Hanumān allowed himself to be bound by Indrajit's *Astra* out of respect for Brahmā while also entering Rāvaṇ's court and confronting him directly, is similar to his earlier interaction with Surasā, the mother of serpents. Brahmā had also granted her a boon, with which Hanumān complied out of respect. Brahmā represents total knowledge, Veda, embodied in the DNA of every cell. On the molecular level, wholeness is present in DNA and manifests its knowledge by means of specific mechanisms, such as the making of messenger RNA and the formation of proteins. The entire functioning of a cell, as well as its communication with other cells, is orchestrated through the expression of information from the DNA—the body's inner intelligence—which unifies all the diverse functions of the physiology. It is the DNA at the core of every cell that ensures that there is precise communication between cells and that there is coordination of all physiological activities, such as the production by some cells of a certain necessary factor while other cells are producing a different factor.

In this holistic functioning of cellular activity we find Hanumān playing the key role as messenger. Hanumān always surrenders to the holistic value of DNA, which expresses itself in different qualities at different times. The different roles that Hanumān took on reflect the diversity of action and interaction played by the messengers or the hormones. Yet in each of these roles, Hanumān consistently surrenders himself to wholeness, which is represented by Rām on the level of the whole physiology and by Brahmā, or Veda, on the level of DNA.

When hormones and messengers attach themselves to the receptors on the cell surface, the mechanism of attachment is called a binding mechanism. The binding mechanism is like a key that enters a lock and unlocks a certain



set of activities, or mechanisms. These mechanisms in turn lead to a set of reactions that ultimately allow the message to reach the DNA itself. When the DNA recognizes the message, it responds by producing another set of actions that lead to the fulfilment of the cell's requirement. Therefore the manner in which Hanumān was bound depicts the necessary mechanism for entry into the cell. In this case Hanumān was able to enter the court of Rāvaṇ, which corresponds to entry into the location of the DNA, the Veda, because in the past Rāvaṇ had been a great knower of Veda.

### ***Sarga 49–50: Hanumān's Meeting with Rāvaṇ***

We know that as a *Rākshasa*, Rāvaṇ corresponds to an anomaly, a problem in the physiology that needs to be corrected by the holistic functioning of Rām. In this case we will examine Rāvaṇ on the cellular level, and later we will see him expressed on a gross level of the physiology, in the abnormal functioning of the structure of the cerebellum.

Rāvaṇ represents an anomaly that takes different shapes. It may be a functional anomaly—for example, a nerve cell that starts to fire more frequently than required—or it may be a structural anomaly, such as a tumour cell that begins to multiply excessively. It could also be anomalous cells that produce crystallised waste products that cause inflammation in the joints, or it could be a cell undergoing a degenerative process. There are many types of anomalous cells, but the essence of each is the inability of its inner intelligence, available in the DNA, to function in harmony with the total requirements of the physiology.

As king of the *Rākshasas*, Rāvaṇ shook the whole world. Even the *Devatās* and *Ṛishis* were disturbed by the presence of such a powerful anomaly. This type of disruption can also take place on the level of DNA. For example, when a cancer cell loses its connection with DNA, it is as if the DNA in the tumour cell has lost its memory of its Self and is no longer connected with the totality of Natural Law, Veda, and has therefore lost the natural sequence of the building blocks of the genetic code.

We can compare this to an improper recitation of Veda, which disrupts the sequential flow of Natural Law. The main problem highlighted in the Rāmāyaṇ was Rāvaṇ's disruption of the *Ṛishis'* *Yagya* performances. By creating havoc and frightening them, he was effectively halting the performance of Veda. We must be alert to anyone, even today, who diminishes or undermines the value of *Yagya*—to anyone who suggests that *Yagya* performances are based upon an old belief, with no meaning or value. This is akin to helping Rāvaṇ and the *Rākshasas*. The entire universe is disturbed by such an attitude, for the recitation of Veda and the proper performance of Vedic Ceremonies are necessary in order to maintain balance. Maharishi has re-enlivened the Vedic Tradition in India, and has revealed the importance of Vedic Recitation from the most profound level of pure Being.

Rāvaṇ was said to have studied the Veda and to have performed great *Tapas*, so in a sense he was a knower of Veda, a knower of the full potential of life. However, by the time Rām appeared Rāvaṇ had lost his appreciation of Wholeness, and was so specific and powerful in his individual nature that he had become a highly destructive anomaly.

Veda must be understood as total Natural Law. This is the beautiful work that Maharishi has performed in bringing out the true value of Veda for all humanity, for all generations to come. He has made the study of Veda a practical reality, which can remove obstacles and bring happiness, health, wealth, and fulfilment to all levels of the individual and society. If we interpret Veda incorrectly then we are like Rāvaṇ, who knew the Veda but forgot its essential total value. Rāvaṇ used whatever knowledge he had in the wrong way and created havoc. The human physiology deals with such anomalies by first trying to bring them back in tune with Natural Law.

Hanumān allowed himself to be bound by Indrajit in order to enter Rāvaṇ's court, examine his activities, and attempt to influence his actions. In this context we could liken Rāvaṇ to a distortion or mutation of the DNA, capable of resulting in very serious anomalies and diseases. Once in Rāvaṇ's

presence, Hanumān advised him to change his course of action. Rāvaṇ's nature, however, was so completely anomalous—so essentially cancerous—that he refused to accept Hanumān's guidance.

One of the main difficulties with cancer cells is that they cannot respond to messages. Normally a cell grows until it receives a message indicating that it has reached the appropriate size and should maintain itself at that dimension. This is why everything in the body is proportional and is located properly: every cell is guided by the holistic knowledge of the physiology contained in the DNA. We do not have one finger that is abnormally longer than another, or a liver that completely fills our abdomen, because our cells are capable of responding appropriately to messages regarding the holistic needs or requirements of the body. Cancer cells, however, do not respond to such messages and continue to grow at the expense of other cells. The nature of the cancer cell is based on greed in that it has forgotten the *Dharma* of the cell, which is to function within the context of the whole. One of the first protective physiological mechanisms we note in this *sarga* is Hanumān's compassionate attempts to advise the anomaly—Rāvaṇ—to change its course of action by giving it information, instructing it, and trying to awaken it.

Rāvaṇ's inability to respond appropriately is the same phenomenon that occurs in a diseased, cancerous cell. The DNA of such cells has been either overexcited or shut down, leading to a variety of physical and/or mental problems. The physiology attempts to respond to this imbalanced situation by sending messengers that will bring the cell back in tune with wholeness. If the cell does not respond, however, the physiology must remove the anomaly, as Rām must remove Rāvaṇ.

It is beautiful to see that in this scientific age Maharishi has compassionately explained to the leaders and citizens of the world the importance of living in tune with Natural Law, and the importance of knowing Veda in its holistic value, in its totality, and the vital importance of supporting Vedic *Yagya*. Maharishi has constantly encouraged the teachers he trained—his

messengers, his Hanumāns—to inform the world what truth is and what ignorance is, and what course of action must be taken in order to save life on Earth. If this knowledge is not applied properly and in time, the outcome will unfortunately not be desirable, particularly for those who are deep in ignorance and are supporting negative actions similar to those of Rāvaṇ.

In today's world there are many leaders and scientists who are highly knowledgeable about certain areas of science, yet lack a complete picture of the holistic value of Natural Law. We only have to remind ourselves of the regret expressed by so many scientists who investigated the mechanisms of atomic energy, and whose work contributed to the development and use of the atomic bomb. Some knowledge has the undeniable potential to destroy the human race, so it is very important for our leaders to implement Maharishi's plan for using the time-tested knowledge and technology of the Vedic Tradition to create coherence in collective consciousness. This will allow us to have real and permanent peace in the world.

### ***Sarga 51–54: The Burning of the City of Lankā***

In *sarga* 51, Hanumān appeared before Rāvaṇ and advised him to release Sītā, adding that Rām would otherwise destroy him. Rāvaṇ was enraged, and immediately ordered Hanumān killed. Rāvaṇ's younger brother Vibhīṣaṇ, however, convinced him of the impropriety of killing a messenger, so instead Rāvaṇ ordered Hanumān's tail set on fire. Quite uninjured by the flames, Hanumān escaped and leaped from house to house throughout Lankā, setting the city ablaze. In this act we see Hanumān clearly representing the messengers that activate the power of the immune system to 'burn up' and destroy cancerous or foreign cells.

When Hanumān was initially bound and brought into Rāvaṇ's court, he represented the binding of an immune system messenger to a receptor on a cancer cell, and the marking of that cell as 'non-self'. As we recall, 'self' is the state of the normal, optimal functioning of the body, while 'non-self' refers to any foreign material, bacteria, virus, or even a cell that has become

abnormal or cancerous. Recognizing ‘self’ from ‘non-self’, the immune system has a huge arsenal of biochemicals and cells that are able to disrupt and destroy cancer cells or foreign invaders. Hanumān first assumed the role of a messenger that recognizes and marks the diseased cells, and then the role of a messenger that activates all the cells and biochemicals of the immune system, and which can destroy the disease.

The process of removing ‘non-self’ must take place in a highly discriminative manner, or healthy parts of the physiology may also be harmed. We often see modern medicines that are not in tune with the entire intelligence of the physiology, and thus cause harmful side effects even while they are attempting to cure disease.

When Hanumān raced around Lankā with his tail on fire, he burned and destroyed the city along with many *Rākshasas*—abnormalities in the physiology. Although Sītā was imprisoned in Lankā, she was untouched by the fire. This is because Sītā is ‘self’, the healthy part of the body, and is therefore not attacked by the immune system. The house of Rāvaṇ’s younger brother Vibhīshaṇ was similarly undamaged, as Vibhīshaṇ was a great devotee of Viṣṇu. Although he was a *Rākshasa*, he was not an anomaly because he was in tune with Rām, and as such he was part of the holistic functioning of Natural Law. Vibhīshaṇ would be considered ‘self’, and therefore would not be destroyed by the immune system.

### ***Sarga 61–68: The Confrontation between the Vānara in the Madhuvan Grove and Hanumān’s Report to Rām***

During their return to Kishkindhā to meet Sugrīva and Rām, the *Vānara* stopped at Madhuvan, a grove belonging to Sugrīva that was filled with honey, and which was said to ‘capture the mind of any living being’ (*sarva-bhūta-manohara*) due to its charm and magical qualities. With Angada’s permission, the *Vānara* consumed vast quantities of honey, wreaking havoc upon much of the grove.

They were opposed, however, by Dadhimukha and certain other *Vānara* who had been charged by Sugrīva to guard the grove. This illustrates one of the basic mechanisms that occurs when hormones attach themselves to receptors on cells. When a hormone or a transmitter reaches a cell, it attaches to its corresponding receptor on the surface of the cell. This attachment leads to the activation of a second group of messengers, which initiate a process of cellular activity. These processes are highly specific and can either inhibit or activate enzymes and other cellular components in order to elicit a specific response.

Cells and tissues have different types of receptors, and many different types of messengers are able to attach to these receptors. There may even be different receptors on one cell, and thus different messengers might give different messages to the cell. One message might demand that the cell begin to store a specific substance, such as glucose, and to transform the glucose into glycogen for storage, whereas another message might demand that the cell begin to break down glycogen to make glucose available for the body.

In the first case, the demand is for the glucose to be taken from the circulation and placed in the liver to be stored as glycogen. This process of energy storage takes place naturally when there is an excess of glucose circulating in the blood. The liver is activated to store the excess glucose as glycogen so that it can be used later when the body's sugar levels are low. In the second case, the demand is for the glycogen to be metabolized into glucose. This would help replenish the sugar or glucose in the blood, and help ensure that all of the body's cells receive sufficient amounts of nutrients at the required time.

These two messages have very different demands. One is to initiate the anabolic process, in which sugar is taken from the circulation and stored as glycogen, and the second is to initiate the catabolic process, in which glycogen is taken from the liver and broken down and immediately released as sugar that circulates in the blood. These processes may take place



simultaneously in a manner that leads to the creation of a state of dynamic equilibrium, which maintains the levels of sugar or glucose in the blood at a stable level.

This dynamic equilibrium is the basis of the process commonly known as homeostasis. There are always molecules of sugar being taken in for storage as glycogen, and there are always molecules of glycogen that are being metabolized to produce sugar. In this dynamic process there is a delicate balance between anabolism and catabolism, between storage and utilization, which is regulated by the overall requirements of the physiology. There is a hierarchical organization in this regulation that is first under the direct control of specific glands, which are in turn under the control of the pituitary gland. The pituitary gland is under the control of the central nervous system, in which Rām is located.

In the story there are also two messages: Angada told the *Vānara* that they could eat the honey in the grove, while Dadhimukha told them that they should not. These two mechanisms appear contradictory, and both involve the interaction between a receptor and a messenger, in a lock and key type of reaction. The key fits the lock perfectly and the response is the very specific opening of certain channels that leads to the activation of the cell in a specific manner. In this case there are two messengers that demand two different effects. The result is a dynamic balance created between the actions produced by the two messages.

All of these complex interactions and modifications in the physiology are illustrated by this story. For example, the injuries and thrashing that occurred when the *Vānara* began to fight can be explained in terms of the mechanisms of receptor and messenger interactions. Often a receptor has an antagonistic factor attached to it that will inhibit the receptor instead of activating it. In such situations, when the hormone that needs to activate the receptor arrives and is blocked, it is either unable to act or in some cases it is able to dislocate the antagonist and lodge itself in the receptor and create the required effects.

This process in which two or more different hormones compete for the same receptor is called competitive inhibition.

The dynamics of these interactions often depend on the levels of activity and the concentrations of the various messengers and hormones. The messenger or hormone that has the highest level of activation will win the race, as the control of the level of activation is regulated by the hierarchical control mechanism we described earlier. For example, when Dadhimukha and the guards were concerned about the destruction of the grove, they referred to Sugrīva, who corresponds to the pituitary gland. Sugrīva reasoned that the *Vānara* must have found Sītā, and were celebrating by drinking the honey in the grove. He therefore believed that there was no problem, and sent back a message saying that they could eat the honey. The fact that Hanumān also gave his permission for the *Vānara* to consume the honey shows that he indeed represents the holistic value of all hormones and messengers. When Dadhimukha returned to the grove, he reconciled with Angada and informed the *Vānara* that Sugrīva was eagerly awaiting their return.

Angada, Hanumān, and the *Vānara* all returned to Kishkindhā, where Hanumān told Rām and Lakshmaṇ of his discovery of Sītā's location and the details of her message to Rām. Hanumān demonstrated precise physiological actions that are truly in accordance with the wholeness of the physiology, with Rām. It is his devotion to Rām that allowed him to achieve great feats and to be the hero of heroes among the galaxy of administrators of the universe. It is Hanumān who re-enlivened the link between *Purusha* and *Prakṛiti*, even informing Rāvaṇ of his opportunity to be saved. Unfortunately, Rāvaṇ was limited and specific in his thinking and did not respond to Hanumān, and thus was destined to be removed.

Natural Law is invincible and everything will inevitably be drawn towards harmony with Natural Law. However, those who choose to remain on the path of ignorance cause unnecessary suffering to themselves and others. Fortunately, through the blessings of Maharishi, Guru Dev, and the Holy

Tradition of Vedic Masters, we now have the total knowledge of Natural Law, which can create Heaven on Earth for everyone.

### ***Footnotes***

1. See Chapter XIII, [Rām Gives His Ring to Hanumān to Present to Sītā](#).



# Chapter XV

## *Yuddha Kāṇḍ and Uttar Kāṇḍ—*

### **Rāvaṇ and His Brothers**

### **in Human Physiology**

**W**e have now reached the last two *Kāṇḍa* of Vālmīki's Rāmāyaṇ, *Yuddha Kāṇḍ*, 'the chapter of the great battle', and *Uttar Kāṇḍ*, 'the final chapter'. The *Yuddha Kāṇḍ* is the story of Rām's journey to Lankā for his final confrontation with Rāvaṇ, while the *Uttar Kāṇḍ* includes many stories that provide the origin and history of some of the characters such as Hanumān, Rāvaṇ, and Rāvaṇ's sons and brothers. And in the *Uttar Kāṇḍ* we have a beautiful description of Rājā Rām sitting in Ayodhyā with Sītā, the *Ṛishis*, and Hanumān, as he ruled his kingdom for eleven thousand years.

In order for us to fully understand the value of the interactions between the different forces of Nature that take place in the *Yuddha Kāṇḍ*, we will not follow the story *sarga* by *sarga* as we have done in previous chapters. Instead, we will first consider a few stories from the *Uttar Kāṇḍ*, particularly those concerning Rāvaṇ and how he came to be born as a *Rākshasa*, and this will give us a more profound basis for understanding his behaviour in the final battle.

#### ***Uttar Kāṇḍ, Sarga 9–34: The Story of Rāvaṇ***

Rāvaṇ's mother Kaikasī visited her future husband Vishravas for the first time as a young maiden, but she did not realize that her timing was inauspicious, for he was in the midst of a *Yagya* performance. Because she interrupted the *Yagya*, Vishravas informed her that their first three children would be cruel, ferocious looking, and fond of other malicious beings. Kaikasī begged Vishravas to relent and be kind to her, and so he promised that their fourth and last child would be always established in *Dharma*,

Natural Law.

In time Kaikasī began to bear children, first Rāvaṇ, next his brother Kumbhakarṇa, and then their sister Shūrpaṇakhā, all three of whom had cruel dispositions. Finally Rāvaṇ's youngest brother Vibhīshaṇ was born, and while he too was a *Rākshasa*, he was completely established in *Dharma* and given to study of the Veda.

Timing plays an important part in any activity, especially with regard to the performance of a *Yagya*. For unhindered and rapid progress, an action must be initiated at the appropriate time and evolve in a correct and sequential flow. It is this exactitude that inevitably leads to the achievement of the goal.

The cerebellum, or small brain, is one of the most critical physiological structures, involved in the planning and execution of all motor action, particularly the timing of bodily movements. Movement must take place in a proper sequence: if we want to walk from one place to another we must step with one leg and then the other, moving forward at an appropriate speed in order to reach the destination in the right manner and at the correct time. All of this involves the activity of the cerebellum.

The cerebellum is also involved in the action of a *Paṇḍit* as he speaks, chants, or moves his hands during *Yagya* performance. Whether he is putting the ghee in the fire or offering flowers, the *Paṇḍit* must conform to a set of precise movements in an exact sequence. A *Paṇḍit* begins his performance by first introducing a *Sankalpa* in his awareness, and then each movement comes automatically and spontaneously, orchestrated by the central nervous system and in particular by the cerebellum.

The intention and initiation of a specific action begins in the sensory cortex and in the motor cortex, and involves the integrated functioning of many areas of the brain, including the temporal lobes, which are involved in memory; the occipital lobes, involved in vision; the parietal lobes, involved in touch; and the frontal lobes, involved in anticipation of the future. The

actual performance of an action requires the highly precise coordination of the muscles, some of which must contract while others relax. Indeed, there are multiple levels of coordination necessary for an action to be smooth.

Let us consider the simple example of asking a friend to hand you a pencil lying on a nearby table. The very first response of the friend is an unconscious analysis of the distance along with an appreciation of the weight of the pencil, so that the hand can move in a balanced way until it reaches the pencil. This simple process of handling an object is a very exacting process, in which the cerebellum plays a vital role. From moment to moment the cerebellum judges how the action is proceeding, and whether it is in tune with the original intention. The cerebellum of our friend is also receiving information from both the brain and spinal cord. It then compares the brain's request with the muscles' performance, and adjusts the action so that it is most appropriate for achieving the goal.

The timing of the sequence of events is another important factor that is also being coordinated by the cerebellum. In the case of Rāvaṇ's mother, it was the timing that was inappropriate when she visited her intended husband, and therefore the result was undesirable. This inappropriate timing resulted in the birth of Rāvaṇ, who corresponds to an abnormal structure or activity within the cerebellum. When the cerebellum functions inappropriately—either because of an over-excitation of neuronal pathways, a biochemical imbalance, or the presence of a tumour—the result is tremor, or shaking movements. Our friend may want to pick up the pencil from the table, but the hand may shake as it moves towards the target if the cerebellum is not working properly. Or it may overshoot or undershoot, in which case the hand is likely to miss the pencil. This type of disorder in the cerebellum is called 'motion tremor'.

In order for an action to be smooth, many different parts of the physiology must be involved. Do we grasp the pencil with a light grip or a strong grip? Is the object heavy or light? We take these detailed considerations for granted



because our physiology works automatically as it carries out precise and complicated tasks that are beyond the capacity of most computers. It is true, of course, that more and more sophisticated computers and robots have been developed, but this hugely expensive process has required many years of scientific research in order to develop the software and the mechanics necessary for the computer or robot to be able to merely pick up an object and place it somewhere. Often the software programs are formulated on planned actions based on human motion. One approach is to connect a person's hand to the computer, and while that person is accomplishing some motion the computer collects information and learns how to repeat it.

Very coherent and well coordinated activities take place in the brain for even the simplest motions involved in a *Yagya*. During the *Yagya*, a transformation takes place within the consciousness of the *Paṇḍit*. While the *Paṇḍit* is performing the *Yagya*, he first has an intention, or *Sankalpa*, then he recites Sanskrit expressions while performing specific activities. A special relationship takes place between his intention, the movements of his body, and his speech. This relationship creates a unique state in his awareness that results in the activation of those parts of his brain that are the counterparts of the *Grahas* (planets), the *Devatās* (the administrators of the universe), and the different *Ṛishis* that are lively in his brain as they create balance and feedback both within his physiology and in his environment.

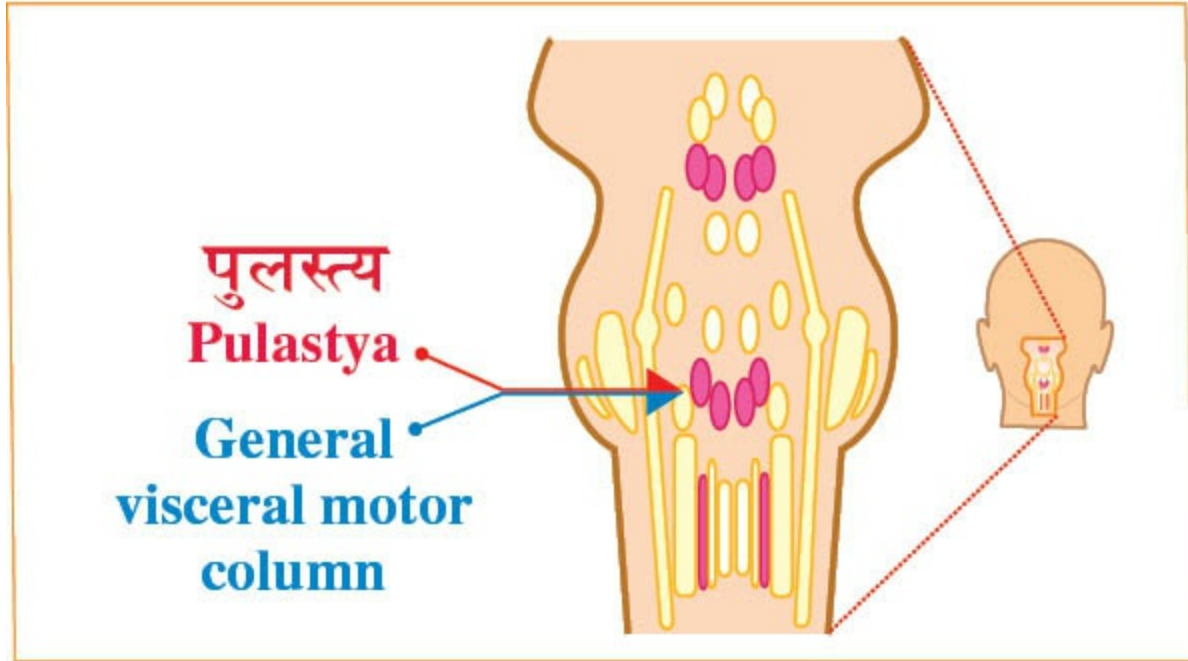
The performance of a *Yagya* by a *Paṇḍit* has two effects. First, it activates specific parts of the brain that begin to work together in a highly integrated manner to create a certain physical and mental state. The characteristics of this state reveal the cosmic conditions required in order to enliven a particular administrative intelligence of Natural Law, which will ensure that the *Yagya* has its intended effect. The second effect is to attune the *Paṇḍit* to be in harmony with Natural Law, developing his own consciousness. The performance of a *Yagya* has these profound influences, both on the person who requests it and on the *Paṇḍit* himself. Like every human being, a *Paṇḍit* is truly Cosmic—he is total Veda and the living embodiment of the Rāmāyaṇ,

and therefore when his consciousness is awakening he produces an effect that is beyond time or space.

The performance of a *Yagya* is extremely powerful and highly precise, but it must occur at the proper time, in the proper sequence, and in the proper manner. This is vital because our brain and physiology are connected with the cosmos, and therefore our own inner cycles must be connected to the cycles of the cosmos. The proper sequence is necessary in order to awaken the *Devatās* (administrators of the universe), *Grahas* (planets), and Nakshatras (lunar asterisms) within us. These are present in our physiology but they must be properly stimulated, or awakened, in order to produce the desired result. If there is a request at the wrong time or any disturbance of the precise and orderly process, then an imbalance or anomaly will arise in the physiology.

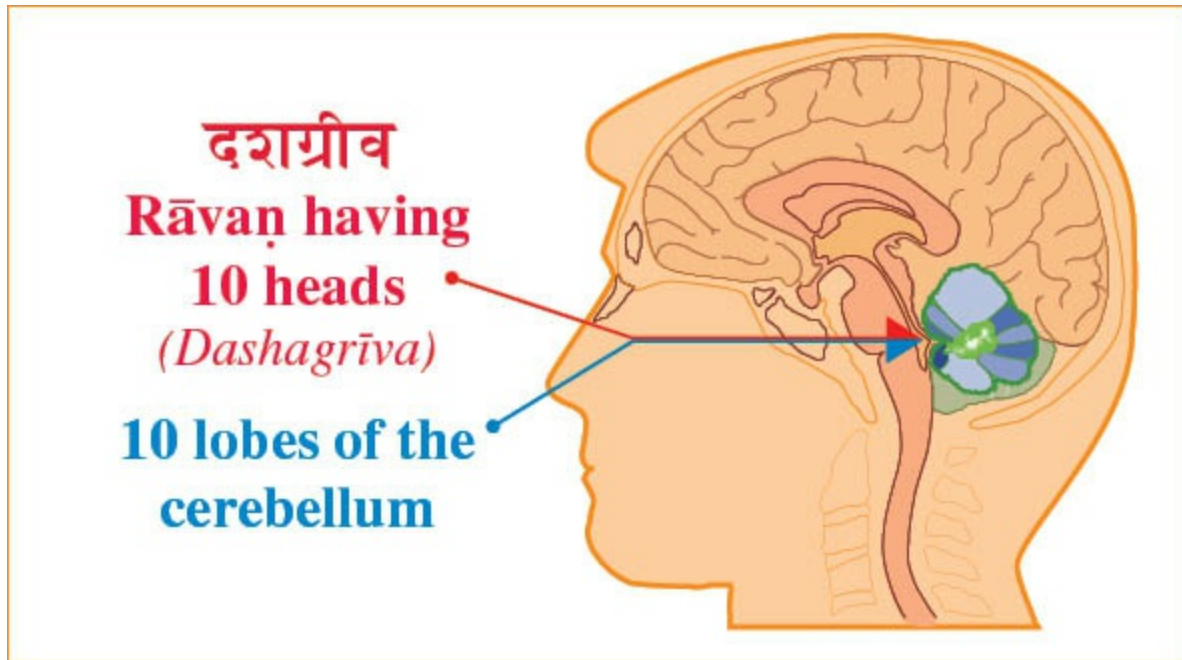
This is the unfortunate situation that gave rise to the birth of Rāvaṇ. Rāvaṇ is present as an anomaly in the cerebellum. Whenever Rāvaṇ appeared, some tremor or shaking inevitably followed. He always created fear and trembling. Rām himself was badly shaken and upset by Rāvaṇ's abduction of Sītā, and started to shake. But even though we see that abnormalities in the cerebellum lead to shaking of the whole physiology, Rām is able to correct this by aligning the cerebellum with the holistic functioning of the brain. The cerebellum is a powerful and necessary part of our physiology, which has only to be put in proper balance.

It is interesting to note that Rāvaṇ's grandfather is Pulastya, one of the *Sapta Ṛishis*, who corresponds to one of the tracts in the brainstem known as the general visceral motor column. The general visceral motor column is responsible for shedding tears, perspiration, and for all the activities involved in the physical expression of emotion, including shaking or trembling. We therefore see a distinct relationship between the description of Rāvaṇ and his ancestry in the Rāmāyaṇ, and the physiological structures that he represents.

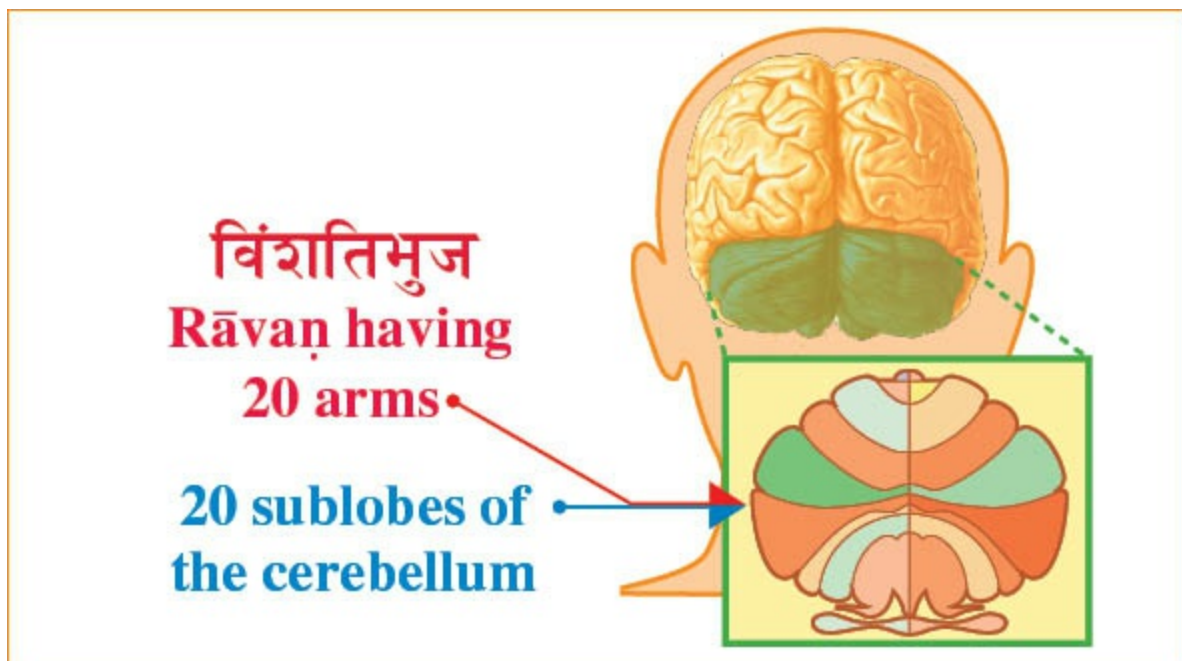


**Figure 15.1 Rishi Pulastya corresponds to the general visceral motor column of the brainstem.**

If we examine the cerebellum in greater detail we see that it consists of ten lobes, which correspond to Rāvaṇ's ten heads (Rāvaṇ's original name was Dashagrīva, which means 'one with ten heads'). Each of the ten lobes of the cerebellum is divided into two parts, one on the right side and one on the left, making twenty parts, which correspond to Rāvaṇ's twenty arms.



**Figure 15.2** The 10 heads of Rāvaṇ correspond to the 10 lobes of the cerebellum.



**Figure 15.3** Rāvaṇ's 20 arms correspond to the 20 sublobes of the cerebellum.

Since Lankā is located at the southern tip of India, we can think of it as being located in the ‘southern’ part of the brain, corresponding to the cerebellum. If we view the brain from its left side (see [figure 15.2](#)), we will find that the position of the cerebellum relative to the rest of the brain resembles the location of Lankā relative to India. We can even see that the cerebellum is partially separated from the rest of the brain by the fourth ventricle, an area filled with cerebrospinal fluid that corresponds to the sea separating Lankā from India. The connections between the brain and the cerebellum are essentially bridges, very much like the bridge between Lankā and India.

Rāvaṇ is an anomaly that is concentrated in the cerebellum. In the Rāmāyaṇ, he seized Lankā from his half-brother Kuber. His disturbance of the *Yagya*, and therefore his disruption of the strength of the *Devatās*, is correlated with a disturbance in the cerebellum, where Lankā is located. And when the cerebellum is disturbed, the entire physiology is disturbed.

## **The Specifying Value of Natural Law**

In *Human Physiology: Expression of Veda and the Vedic Literature*, we found that the cerebellum corresponds to the branch of Vedic Literature known as Vaisheshik,<sup>1</sup> which unfolds the specifying quality of intelligence of Natural Law. Maharishi has explained that when the specifying value of Natural Law becomes extreme, there is a disruption in the ability to connect with Wholeness, and this is Rāvaṇ’s predominant characteristic. Wholeness is the state of unbounded pure Being, and as long as this experience is maintained, any specific activity in the physical world will be in tune with the whole and therefore in harmony with the evolutionary power of Natural Law. Whenever the specific becomes isolated from the whole, problems arise. Rāvaṇ is the value of Vaisheshik taken to such an extreme expression of specificity that it completely ignores Wholeness.

In this light we see that Rāvaṇ’s behaviour, based solely upon his own selfish benefit, was disconnected from the environment and from anything that did not directly concern him. His sole concern was for his own, limited interest,

and he never considered the importance of anything beyond that self-interest. He became almost mad when he was threatened or when his armies were destroyed, and even though his family, his generals, and many others told him to relinquish Sītā, he would not consider it. Never did he express doubt or regret about his decision, and this obsession ultimately led to his downfall. He saw Sītā as an isolated value, distinct from Rām, but as we have said again and again, the reality of life is that *Prakṛiti* is one with *Purusha*—there is no difference between them. Any perception that they are separate realities is based on deep ignorance.

The cerebellum's functions include all the specifying values described in Vaisheshik, such as the position of the body in space, the timing of its movements, and the direction of movement with respect to individual awareness of position and mental intention. Embodied in the cerebellum, Rāvaṇ therefore corresponds to its abnormal functioning, even though the cerebellum also corresponds to the domain of Lankā.

It is noteworthy that three arteries nourish the cerebellum: the superior cerebellar artery, the anterior inferior cerebellar artery, and the posterior inferior cerebellar artery. The superior cerebellar artery emerges from the basilar artery, while the two inferior cerebellar arteries come from either the basilar artery, or in the case of the posterior inferior cerebellar artery, most often directly from the vertebral artery. These three arteries correspond to the three *Patnī* of Rāvaṇ's father (Viśhravas): Devavarṇinī, Kaikasī, and Rākā. Devavarṇinī, Kuber's mother, corresponds to the superior cerebellar artery. Kaikasī, the mother of Rāvaṇ, Kumbhakarna, Shūrpaṇakhā, and Vibhīshaṇ, corresponds to the anterior inferior cerebellar artery. Rākā, the mother of Khara, Dūshaṇa, and Trishiras, corresponds to the posterior inferior cerebellar artery (see also [figure 7.11](#)).



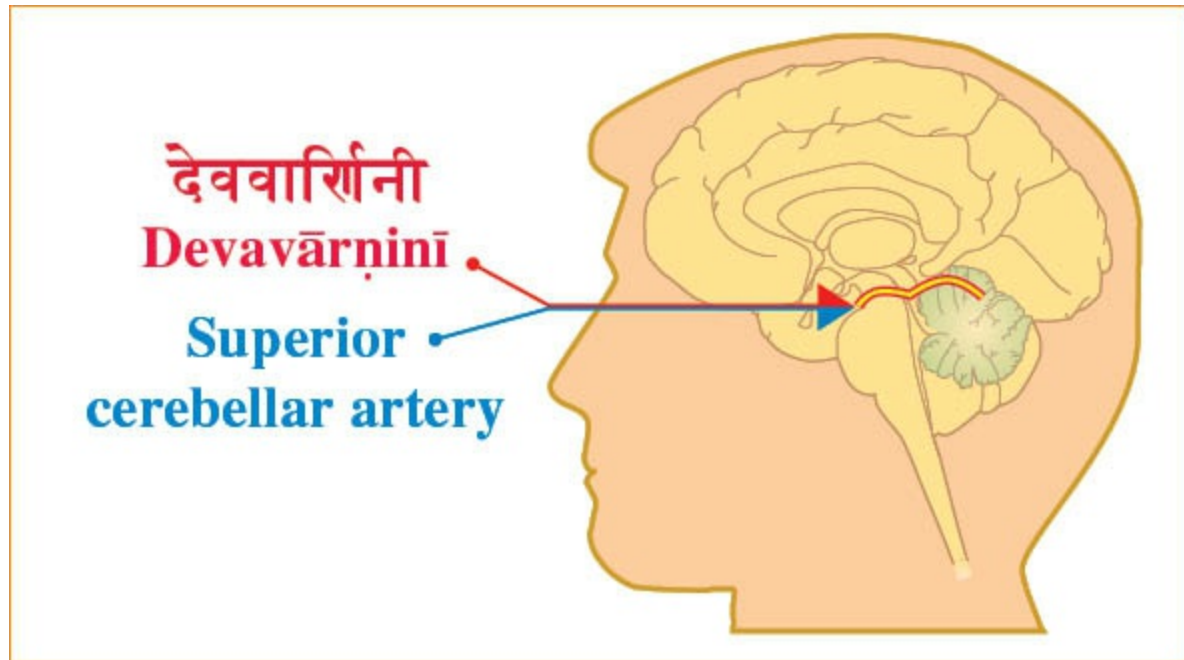


Figure 15.4 Devavārṇinī corresponds to the superior cerebellar artery.

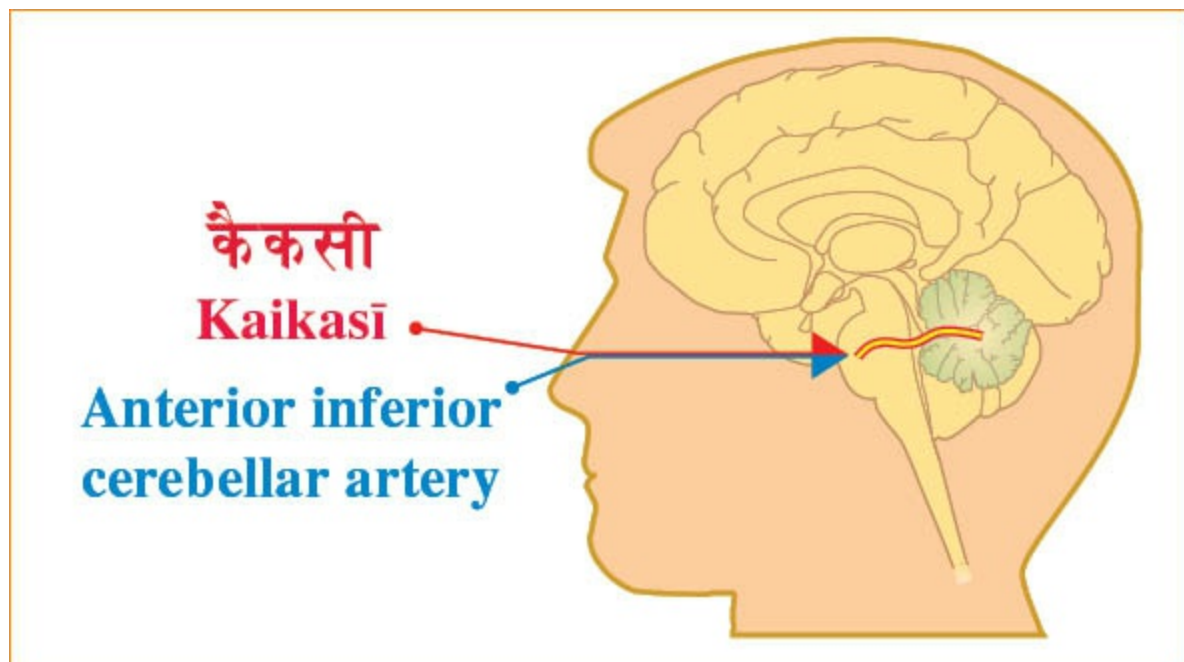
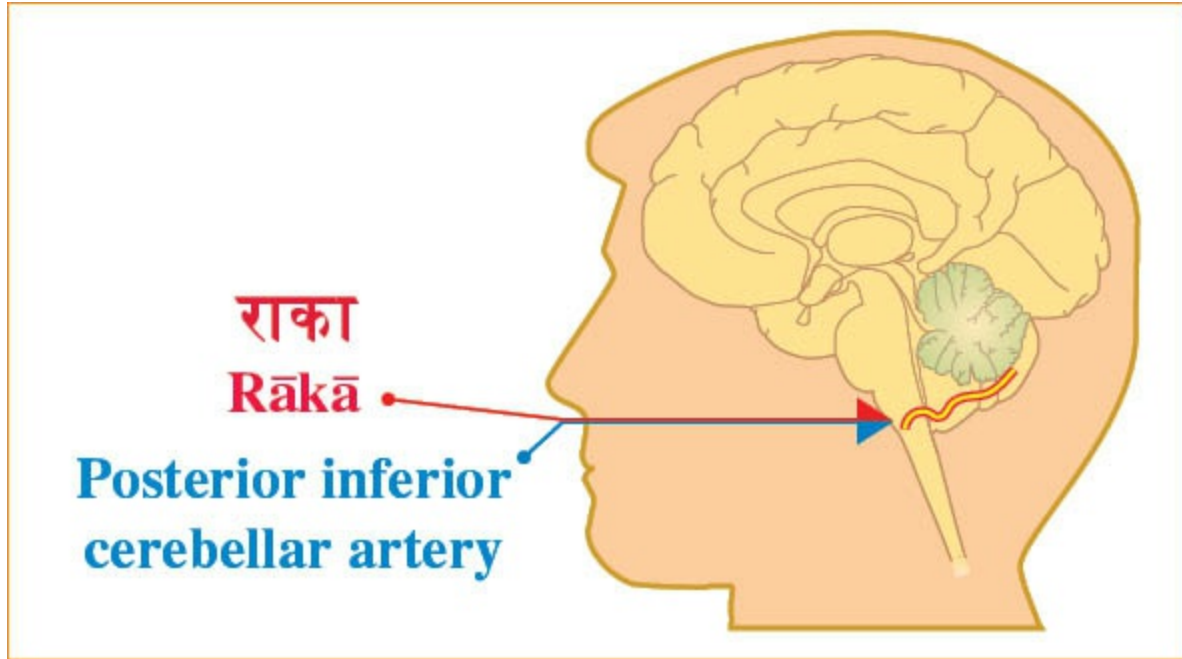


Figure 15.5 Kaikasī corresponds to the anterior inferior cerebellar artery.



**Figure 15.6 Rākā corresponds to the posterior inferior cerebellar artery.**

The names of these arteries tell us about their location. ‘Superior’ means that it is located on the top of the cerebellum, ‘inferior’ means that it is at the bottom, ‘anterior’ refers to the front, and ‘posterior’ is in the back. We know that the arteries are mothers—nourishing values. Kuber is the son of Devavarṇinī, the first mother, who represents an essential blood flow to the cerebellum. (The superior cerebellar artery actually only supplies the anterior rostral cerebellum, a relatively small part when compared to the cerebellum as a whole, though the loss of this blood supply is associated with ‘pure’ cerebellar dysfunction.) Kuber also enjoyed Lankā until Rāvaṇ, his half-brother, expelled him. Kuber’s presence in Lankā corresponds to the properly balanced functioning of the cerebellum.

When Rāvaṇ conquered Lankā, he brought negativity and disruption, which eventually led to the problems and disturbances that we find throughout the Rāmāyaṇ. Rāvaṇ was said to travel to many places to attack kings and *Devatās*, which corresponds to the extension of the cerebellum’s activities to various parts of the nervous system by means of the formation of neural connections. The cerebellum sends nerve fibres to different parts of the brain

—the midbrain and the brainstem—where the *Ṛishis* and *Devatās* are present, and in case of an imbalance through the same connections it can send disturbing nerve impulses, which correspond to Rāvaṇ's disruption of the activities of other parts of the body.

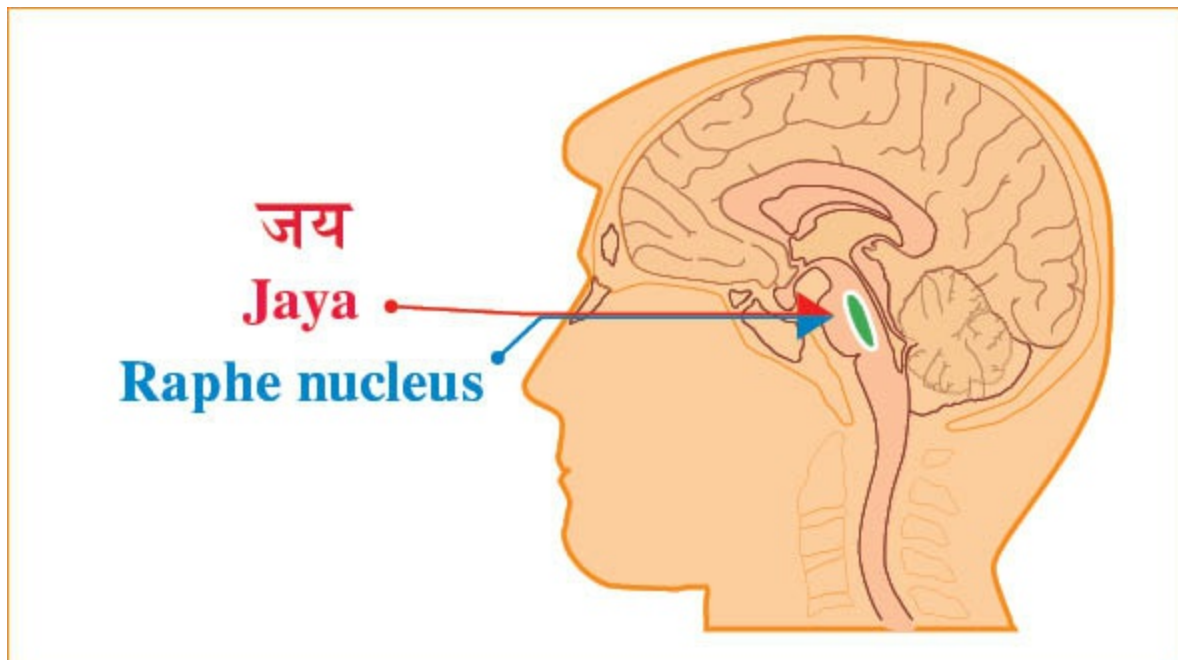
### **The Story of Jaya and Vijaya, the Gatekeepers of Viṣṇu**

If we examine Rāvaṇ's takeover of the cerebellum from a phylogenetic or developmental perspective, the process can be seen as a positive evolutionary process. The various stages of development of the human brain can be understood in terms of the incarnation and reincarnation of specific characters in the Rāmāyaṇ. This is particularly clear in the story of Jaya and Vijaya, Viṣṇu's gatekeepers, which is narrated in the Shrīmad Bhāgavatam, an aspect of Purāṇ. Jaya and Vijaya stand at the gate of the perfectly functioning central nervous system, which corresponds to Lord Viṣṇu. This gateway is located in an area within the brainstem called the reticular formation, which we considered in our discussion of the Bāl Kāṇḍ (see [Chapter VII](#)).

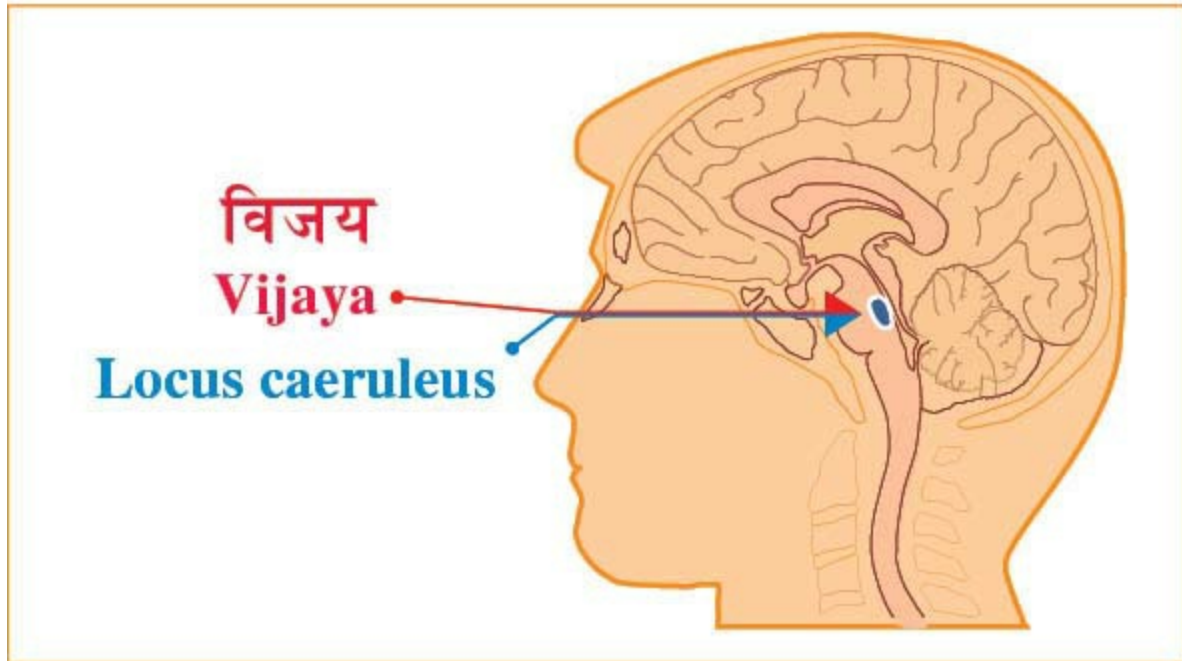
Neurophysiologists have identified gating mechanisms in this area that have the ability to prevent sensory impulses from reaching the higher parts of the nervous system. For example, if a sound is made near the ear of someone sleeping, it will cause the tympanic membrane within the ear to vibrate, but the gating mechanisms will prevent the information from being processed in the higher parts of the nervous system. The result, therefore, will be no conscious awareness of the sound and no waking up from sleep.

If we look more closely at the gating mechanisms we find that there are two predominant groups of nuclei in the reticular formation, which are the principal 'gate keepers' of the brain, and which have their own characteristic type of neurotransmitter. These are called the serotonergic and adrenergic/noradrenergic neurons, and are located in the raphe nucleus and the locus caeruleus respectively. Jaya corresponds to the raphe nucleus while Vijaya corresponds to the locus caeruleus. These tiny neuronal structures can

be seen only through a microscope, but have powerful and far-reaching influences. When they become overactive or damaged, they can close down and cause loss of consciousness as well as the disruption of autonomic function, including heart rate and breathing. In the worst case, if the gates close completely a person may enter a long-term coma and not survive. During nightly sleep, however, they have their own cyclicity in which the gates normally open and close. The gatekeepers can dampen or amplify any sensory experience, and they can modify how an experience is perceived.

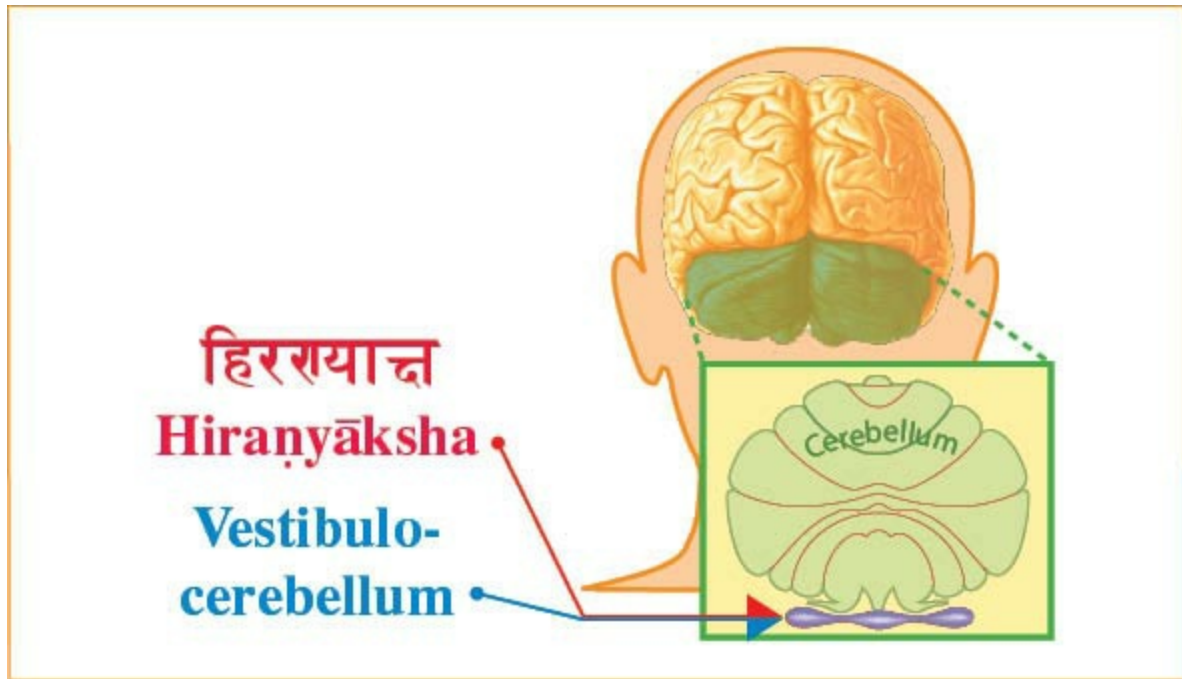


**Figure 15.7 Jaya corresponds to the raphe nucleus.**



**Figure 15.8 Vijaya corresponds to the locus caeruleus.**

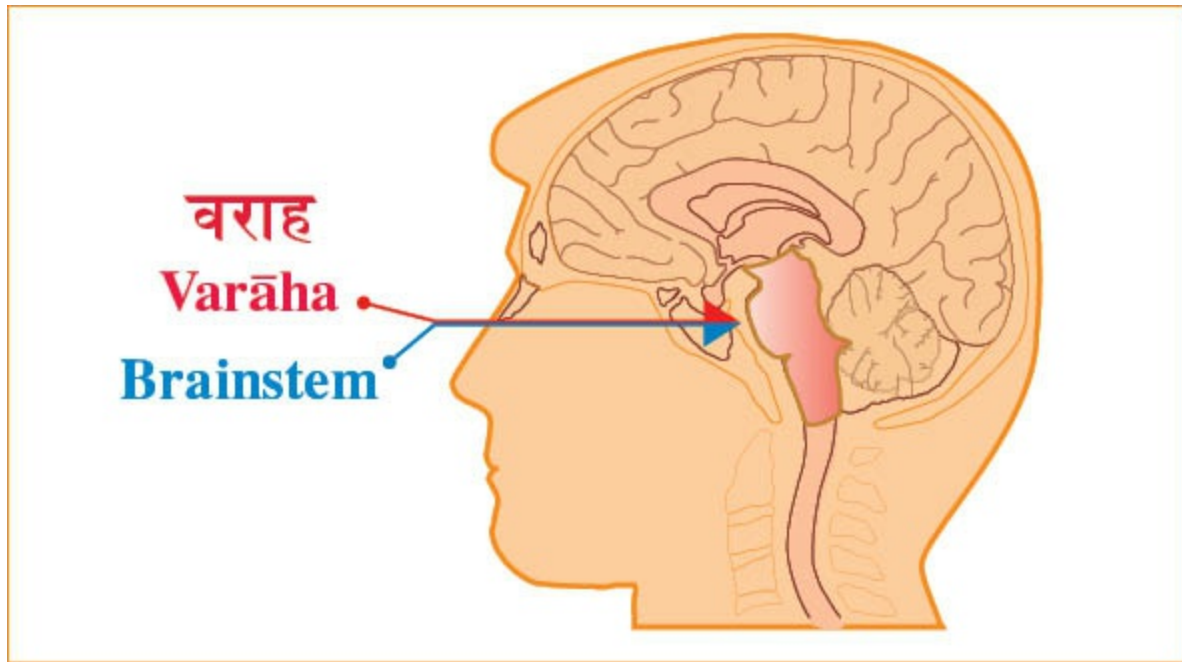
Jaya and Vijaya once questioned a powerful group of *Rishis* who wished to pay their respects to Lord Vishnu, but their arrogance and lack of respect resulted in the *Rishis* cursing them to become terrible *Rākshasas* for three lifetimes. As we shall see, some of these lives correspond to the evolutionary development of basic structures in the cerebellum.



**Figure 15.9** The *Rākshasa* Hiranyāksha corresponds to the vestibulocerebellum (early stage of development).

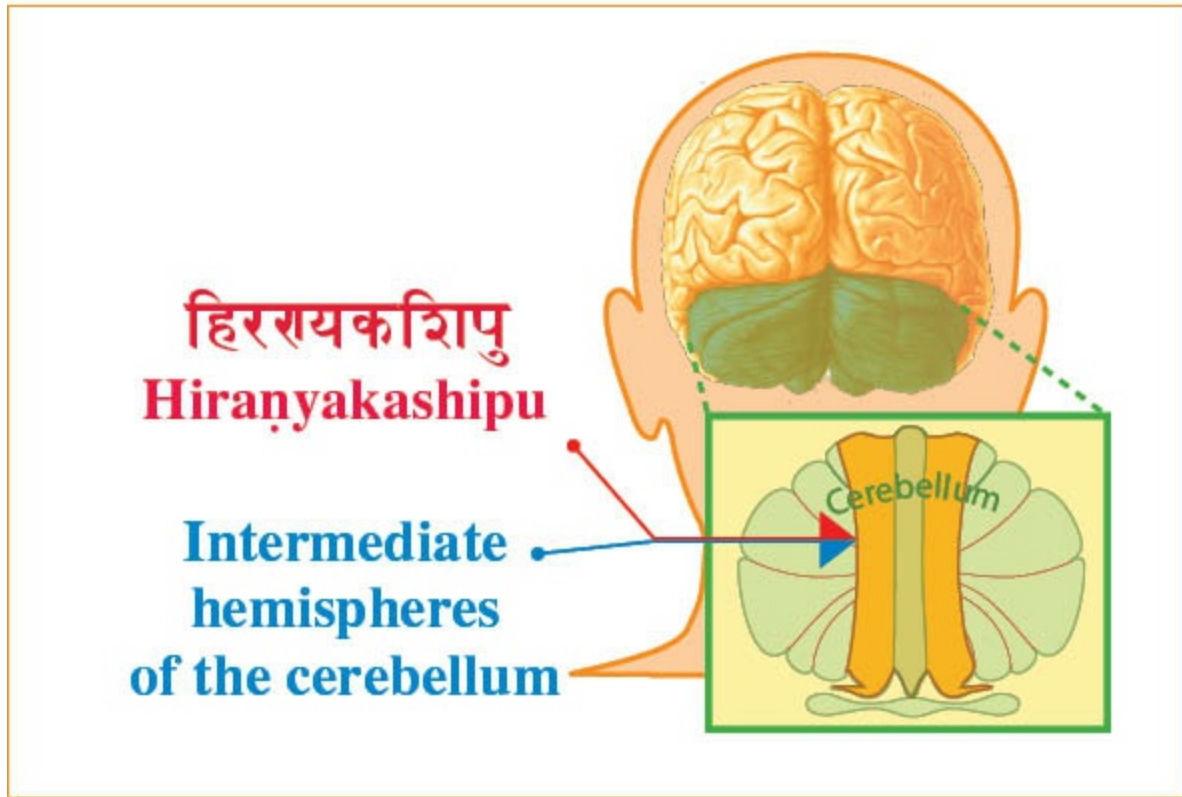
The most primitive level of activity in the cerebellum takes place in what is called the vestibulocerebellum. Lower animals, such as fish, do not have an entire cerebellum, just the small part called the vestibulocerebellum. In the next highest level of development in the phylogenetic ladder, we find animals that possess an intermediate cerebellum. In still higher species, we see the development of what is called the lateral hemispheres of the cerebellum, which are largest in human beings when compared to primates or other animals, and mark the full evolutionary development of the cerebellum.





**Figure 15.10 Varāha, Vishṇu's third incarnation, corresponds to the brainstem.**

In the Shrīmad Bhāgavatam, Jaya was born first as Hiraṇyāksha, a *Rākshasa* who represents an early stage of development of the vestibulocerebellum. Under the control of Hiraṇyāksha, the vestibulocerebellum was not functioning properly and needed to be corrected by Vishṇu's third incarnation as Varāha, the Boar. Varāha is located within the brainstem,<sup>2</sup> which acts directly upon the vestibulocerebellum where Hiraṇyāksha is present. In his first birth, Vijaya became Hiraṇyakashipu, a *Rākshasa* who corresponds to the intermediate hemispheres of the cerebellum. Under his control, this area of the cerebellum functioned improperly. The intermediate hemispheres are concerned with higher levels of activity of the cerebellum, including the ability to monitor and recheck messages coming from the brain and spinal cord. They also calculate the necessary timing for movement in space, utilizing specialized feed-forward mechanisms.

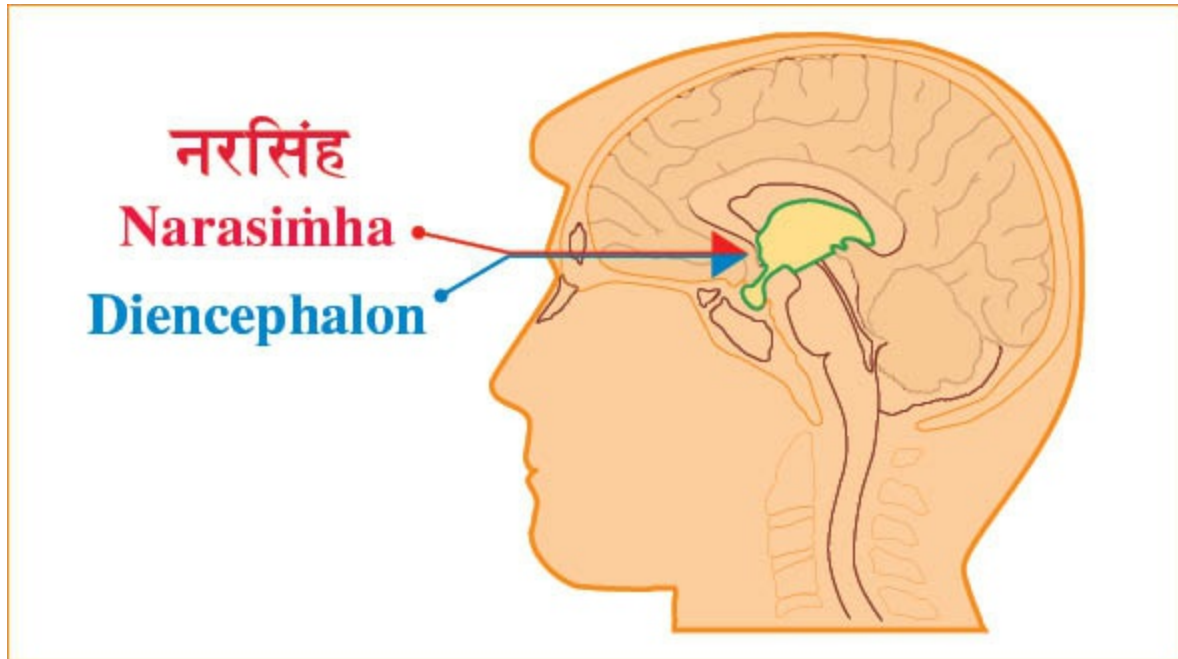


**Figure 15.11 The *Rākshasa* Hiraṇyakashipu corresponds to the intermediate hemispheres of the cerebellum (early stage of development).**

A feed-forward mechanism anticipates and prepares the motor system to accomplish a specific task. If we must walk to a door that is over two metres away, then we have to take about three steps. If it is 10 metres away, then there are correspondingly more steps. This kind of anticipation and preparation from the feed-forward mechanism is important in the programming of motion.

The Shrīmad Bhāgavatam describes how Hiraṇyakashipu was killed by Narasimha, another incarnation of Viṣṇu, who corresponds to the diencephalon—a higher brain centre located directly above the brainstem.<sup>3</sup> The diencephalon places the intermediate hemispheres of the cerebellum under its control so that they can function properly. The word *diencephalon* means ‘between brain’, and the diencephalon contains areas whose functions

occur at the transition between day and night. In the central nervous system the diencephalon appears to emerge from the spinal cord and brainstem, which resembles the pillar from which Narasimha emerged.



**Figure 15.12 Narasimha, Vishṇu's fourth incarnation, corresponds to the diencephalon.**

Jaya and Vijaya were later born as Rāvaṇ and Kumbhakarna, and in these incarnations they correspond to more developed levels of the cerebellum, specifically to the lateral hemispheres and the fastigial nucleus respectively. We will later consider each of these correspondences in greater detail. Vishṇu in his seventh incarnation as Rām must once again destroy these *Rākshasas*, and re-establish the activity of the human cerebellum at its highest level of phylogenetic development (see [figure 15.13](#)).

### **The Self-Referral Process of Evolution**

Homeostasis is that state of dynamic equilibrium in which silence and dynamism coexist. In order for a new step of evolution to take place, the existing state of dynamic equilibrium must be disturbed so that a new and

more evolved state can emerge. In Chapter VIII we discussed the mechanics of evolution and the process of expansion in detail, explaining that the destructive element in nature is a necessity for expansion to take place—the old state must be destroyed before the new state can be created. We can compare a disturbance in equilibrium to the destructive, or *Rākshasic*, element. When considered only from the perspective of their narrow, disturbing characteristics, *Rākshasic* activity appears to be destructive and negative. In order to keep their activity under control and restore balance to the physiology, the development of many new connections originating from the higher centres where Rām is located must occur simultaneously.

### **The Transformations of Jaya and Vijaya and Their Correspondence in the Physiology**

<b>Vishṇu's Gatekeepers</b> Located in the brainstem in the reticular formation, the gateway to the central nervous system, corresponding to Lord Vishṇu	<b>1<sup>st</sup> Birth as a <i>Rākshasa</i></b> Normalized under the influence of Varāha and Narasimha, 3 <sup>rd</sup> and 4 <sup>th</sup> incarnations of Vishṇu	<b>2<sup>nd</sup> Birth as a <i>Rākshasa</i></b> Corrected under the influence of Rām, 7 <sup>th</sup> incarnation of Vishṇu
<b>जय</b> <b>Jaya</b>  <b>Raphe nucleus</b>	<b>हिरण्याक्ष</b> <b>Hiranyāksha</b> (normalized under Varāha's influence)  <b>Vestibulocerebellum</b> (an early stage of development)	<b>रावण</b> <b>Rāvaṇ</b> (corrected under Rām's influence)  <b>Lateral hemispheres of the cerebellum</b>
<b>विजय</b> <b>Vijaya</b>  <b>Locus caeruleus</b>	<b>हिरण्यकशिपु</b> <b>Hiranyakashipu</b> (normalized under Narasimha's influence)  <b>Intermediate hemispheres of the cerebellum</b> (an early stage of development)	<b>कुम्भकर्ण</b> <b>Kumbhakarṇa</b> (corrected under Rām's influence)  <b>Fastigial nucleus of the cerebellum</b>
In their 3 <sup>rd</sup> and final birth, Jaya and Vijaya appeared as Sisupāla and Dantavakra, and became fully liberated under the influence of Kṛishṇa, the later and 8 <sup>th</sup> incarnation of Vishṇu.		

**Figure 15.13** The steps of transformation of Jaya and Vijaya under the influence of different incarnations of Vishṇu correspond to the establishment of the cerebellum's activity at its highest level.

The appearance of Rāvaṇ and the other *Rākshasas* in the Rāmāyaṇ corresponds precisely to the initial phases of such a highly evolutionary development. This step pertains, among other things, to the development of the cerebellum—in particular its lateral hemispheres—and results in a structure that has powerful control over the performance of action, and which ultimately plays a positive role in the process of evolution.

Rāvaṇ is continually described as creating havoc and disturbing *Ṛishis* and



*Devatās*. This corresponds to the spread of disturbance and dysfunction to various parts of the brain. Ultimately the expansion of Rāvaṇ's disturbance leads to the activation of Rām and to the creation of an integrated physiology. This integration of the physiology corresponds to life in Ayodhyā, a life of perfection in higher states of consciousness.

Thus even though Rāvaṇ represents negativity, it is necessary that he disturbs the equilibrium so that the wholeness of life can express itself in yet another, still greater, level of Wholeness. In the grand scheme of Natural Law, which Maharishi often described as the Will of God, there is only growth, evolution, and perfection. When we view it with a narrow vision, however, we often perceive events in terms of separation, in which some individuals seem to be happy while others experience suffering and pain. But from the perspective of Unity Consciousness, the whole creation is experienced only in terms of Unity. Maharishi has given us the opportunity to both intellectually understand and directly experience this state of Unity, in which time and space, negativity and positivity, happiness and sorrow, and pain and suffering are seen as only relative perceptions of reality.

From a fully enlightened perspective, any disturbance is experienced as a natural part of the grand scheme of the evolution of life. Evolution involves creation and re-creation, a principle that is beautifully expounded in a verse from Ṛk Veda that describes this spontaneous process of evolution in Nature:

नद्धद्योद्ध नद्धद्यो भद्धद्यति जायद्धदुमानः

*Navo-Navo bhavati jāyamānaḥ*  
(Ṛk Veda 10.85.19)

*In the process of transformation, or evolution,  
it is the Totality that is reborn again and again.*

This analysis of the role and value of the destructive element of life should not be construed as a justification for opposing Natural Law. When we act in



accord with Natural Law we enliven it within ourselves, ultimately unfolding Unity Consciousness. But when we act against Natural Law we move away from it, distancing ourselves from Unity Consciousness and creating obstacles to our own growth, evolution, and happiness. It is certainly easier to take the path towards higher states of consciousness than to take a position that is against the evolutionary power of Natural Law and live in a state of suffering and pain.

At the end of the Rāmāyaṇ, Rām handed control of Lankā to Vibhīshaṇ, Rāvaṇ's youngest brother, who represents the dentate nucleus in the cerebellum. Vibhīshaṇ was completely devoted to Viṣṇu and totally devoted to Rām, even advising Rāvaṇ not to fight with Rām. Rāvaṇ would of course not listen, and eventually Vibhīshaṇ sided with Rām against his brother. Vibhīshaṇ's rise to the leadership of Lankā corresponds to a situation in which the powerful cerebellum is connected by means of physical tracts to the nuclei and other brain structures under the control of Rām.

### **Rāvaṇ's Boons**

All the characters in the Rāmāyaṇ, including the *Rākshasas*, received their powers through *Tapas*—the process of turning back to the Self. Rāvaṇ was known for performing very long periods of *Tapas*, and as a result Brahmā granted him boons that allowed him to gain the support of powerful, protecting mechanisms. These include the blood vessels that nourish him as well as the immune system, with all the numerous biochemicals it commands. They protect him and in fact he uses these biochemicals and messengers as part of his own weaponry to shoot powerful arrows at others.

*Tapas* corresponds to all the self-referral processes that sustain and protect the body as an integrated whole. Any system or part of the physiology that is not connected with the whole, with the self, is usually rejected by the body. For example, the immune system rejects foreign materials such as bacteria and viruses, which it determines to be 'non-self'. Any new structure that evolves in the physiology must therefore be accepted as part of the holistic

functioning of the system. In this way, the evolution of the cerebellum and its growth into a structure with numerous connections, can only take place within the framework of the holistic, self-referral values of Natural Law.

It is because of his long periods of *Tapas* that Rāvaṇ is in a sense always present in the physiology. There is a kind of harmonious battle that is continually taking place within our physiology between the organs and organ systems—a battle that always has a positive and evolutionary outcome, because of the overall integrated, holistic functioning of the nervous system. For example, neurons communicate by means of excitatory and inhibitory mechanisms that sometimes appear to conflict with one another. When one neuron sends its messages to another, some messages may be inhibited in favour of a different message. Inhibitory mechanisms are a characteristic part of the functioning of the cerebellum and its communication with other parts of the nervous system. All inhibitory mechanisms occur on the basis of an integrated plan, for otherwise the system could not function properly.

One question must inevitably be asked: why do Brahmā, Viṣṇu, and Shiva give boons to offenders of humanity such as Rāvaṇ? The reality is that the *Rākshasas* are part of the process of creation, and necessary in the cycle of growth and evolution. The play and display of the battles occur in order that evolution take place and its ultimate goal of enlightenment be attained.

As newer levels of growth and evolution are achieved, old levels are superseded. The story of the Rāmāyaṇ is the story of Natural Law, which can be extremely sophisticated and complex. There are many points of view and different levels of appreciation, but the overall message is that anyone in possession of the highest knowledge need have no fear.

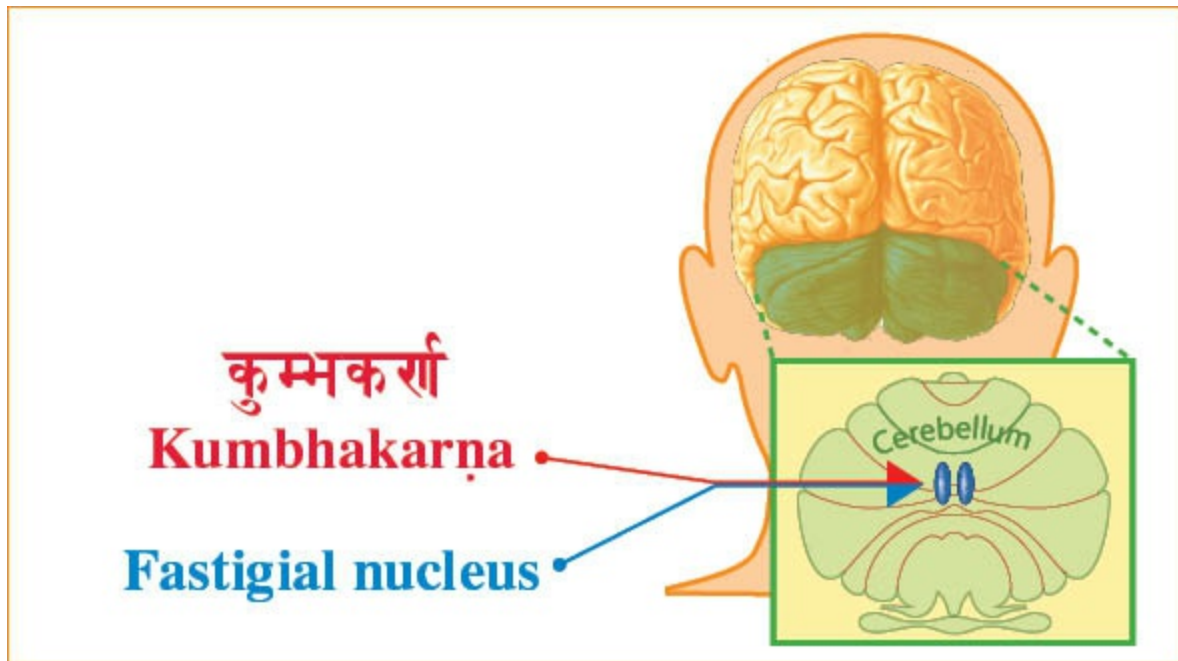
The knowledge contained in the Rāmāyaṇ is given to us out of compassion. This knowledge reveals that life's purpose is to rise above the illusions and problems that can delay our evolution and lead to actions that cause pain and suffering for ourselves and for others. Natural Law guides the force of evolution away from unhealthy situations towards higher and higher levels of

achievement and enlightenment. The Rāmāyaṇ contains all the Laws of Nature—it is an expression of all different values, and gives us the opportunity to perceive them from many different perspectives.

## Rāvaṇ's Brothers

### Kumbhakarṇa

Kumbhakarṇa was a very disturbing *Rākshasa*. He belongs to the fastigial nucleus in the cerebellum, which is connected to the reticular formation and vestibular nucleus in the brainstem as well as to the spinal cord. The fastigial nucleus can act upon the reticular formation, which has a commanding influence on our cycles of waking and sleeping, as well as on the functioning of the body's internal organs.



**Figure 15.14 Kumbhakarṇa, one of Rāvaṇ's brothers, corresponds to the fastigial nucleus of the cerebellum.**

Kumbhakarṇa once performed great *Tapas*, and was about to request the boon of immortality from Brahmā when all the *Devatās* became alarmed and

begged Saraswatī (the *Devatā* presiding over speech) to enter his mouth and cause him to request the boon of sleep. As a result, Kumbhakarna fell asleep for an extremely long time. The fastigial nucleus connects with the reticular formation, which controls waking and sleeping cycles, thus fitting well with Kumbhakarna's unusual sleeping behaviour. A disturbance in its functioning leads to an inability to maintain proper posture. The anterior inferior cerebellar artery nourishes this part of the cerebellum as well as Ravana's location, which is consistent with the fact that both Ravana and Kumbhakarna have the same mother (Kaikasī).

## Vibhīshaṇ

Vibhīshaṇ is Ravana's younger brother, and corresponds to the dentate nucleus. Vibhīshaṇ also performed great *Tapas*, and as a result he too was granted a boon from Brahmā. His request was that he always remain a devotee of Vishṇu, a devotee of Rām. This is why the dentate nucleus (located in the cerebellum) is connected directly to the pre-motor and primary motor cortex—precisely where Rām is found.

The most immediate and direct connection from the cerebellum to the brain is through the dentate nucleus, which is part of a complete system of feedback loops that maintain a high level of balance and cognition for the conscious assessment of potential movement errors, as well as for planning, learning, and the rehearsal of motor action. These feedback loops correspond to Vibhīshaṇ, who desired total surrender to Vishṇu. As a result of his request, Brahmā gave him the boon of immortality, the gift of Wholeness, of Vishṇu. Even though Vibhīshaṇ was a *Rākshasa*, he was able to function in the physiology without being a threat.

This concludes our summary of the history of Ravana and his immediate family and their significance in human physiology. We will now turn to the events unfolding in the *Yuddha Kāṇḍ*.

## ***Yuddha Kāṇḍ, Sarga 1–3:*** **Hanumān’s Description of Lankā**

At the beginning of the *Yuddha Kāṇḍ*, Rām praised Hanumān for his great feat of flying over the sea to Lankā, but at the same time he became concerned at the prospect of crossing such a long distance with a large *Vānara* army. Sugrīva reassured him that a bridge (*setu*) could be built by Nala with the cooperation of Sāgar, the *Devatā* who embodies the ocean. Confident then that the ocean could be traversed, Rām asked Hanumān for a description of Lankā.

Hanumān described Lankā’s structure in great detail, referring even to the gems inlaid in the walls and the spikes guarding the gates, in this way revealing the internal structures of the cerebellum. The cerebellum has an outer layer, or cortex, and within the cortex are inner layers with specific types of cells that look like corals or other gems. The spikes that Hanumān described represent the pointed aspects of the neurons, while the gems represent the bodies of the neurons with their varying forms. Some of these resemble diamonds while others look like branching coral trees. The gates around Lankā are the input and output systems of the cerebellum. On the cellular level these gates represent the gates within the cell membrane, which may contain various molecules and enzymes. Hanumān’s description is highly representative and precise, including both a cellular and gross anatomical description.

## ***Yuddha Kāṇḍ, Sarga 4: The Science of Omens***

In *sarga* 4, Rām reported highly auspicious omens that predicted victory. An omen is the perception of a specific aspect of Natural Law interpreted within the holistic context of the Laws of Nature. Everything in Nature is related to everything else. Movements of the wind or other transformations in weather, a change in the behaviour of animals, or alterations in the feelings of people around us are all phenomena that belong to the functioning of Natural Law as it continuously unfolds in the direction of evolution. The ability to perceive

such events and understand their meaning accurately allows an individual to interpret what is happening in a more holistic manner, and therefore understand the nature of both the present and future with respect to Natural Law.

Omens, therefore, are the perception of wholeness within specificity—the ability to go beyond the narrow boundaries of a small outer event or observation in order to comprehend the holistic value of Natural Law. This reality comes from understanding the functioning of Nature as holistic, and from the ability to see the rhythms of Nature and the correlations between events. Jyotish, for example, is a scientific and mathematical means of interpreting and predicting the effect of the movements of planets and stars, usually with respect to an individual, a society, or even a nation. In this *sarga*, it is the positions of certain planets and stars that are considered omens.

In human physiology, the central nervous system is able to evaluate all the multitudinous specifics in the context of the holistic development of the body. If any part of the body is producing a set of actions or reactions, such as biochemical or cellular activity, then these specific expressions of Natural Law can influence the overall physiology. For example, biochemical factors may circulate in the blood, excite certain cells, and cause pain. We realize that there is some transformation taking place and that the pain is an indication of the state of health of that area. If the pain reduces, or if there is a change in temperature or other alterations, we are able to determine whether that part of the body is deteriorating or healing itself.

The physiological signs and symptoms of disease and health are indeed predictive indications, and can be interpreted scientifically by physicians and health professionals who have been educated to understand their significance. Pulse diagnosis in Maharishi Ayur-Veda Medicine is a means of detecting abnormalities and analysing a patient's state of health from subtle vibrations in the pulse. In this light, the diagnosis and prognosis a physician offers to a



patient can be thought of as an interpretation of omens, or indications of a condition taking place within the physiology. This is similar to the omens seen by Rām and by some of the *Rishis*.

When an individual knows enough about his own physiology, when he is aware of the different transformations in the body, he can feel when he is not doing well, or when his health is improving. This kind of self-assessment comes from a number of specific factors, which when considered holistically give a special understanding of the future in that particular context. When Rām saw a combination of different omens, he immediately understood their significance, deducing that he would win the battle. This is the same mechanics underlying the perception, based on specific physiological symptoms, that our health is improving or failing.

For example, we find in the Rāmāyaṇ, as well as in other branches of the Vedic Literature, that it is a good omen when either a man's right eye or a woman's left eye throbs, and it is a bad omen when either a man's left eye or a woman's right eye throbs. How can we consider this concept physiologically?

First of all, we know that the left eye is controlled by the right brain and the right eye is controlled by the left brain. And we also know that muscles and sensory systems of the right side of the body go to the left brain while the left muscles and sensory systems of the body send their messages to the right brain. Furthermore, the right side of the brain is more synthetic and artistic in its functioning, while the left side of the brain is responsible for language, analysis, and specific mathematical capabilities.

Experiments have shown that men tend to be more analytical and mathematical than women, functioning more from the left brain. Women, on the other hand, have been shown to be generally more intuitive, holistic, and often more artistic than men, functioning more from the right brain. The omens that are based on the throbbing eyes are related to the left and right side of the body. When a woman sees something with her true, intuitive, and

holistic nature, it is her right brain that is activated and alert. This alertness and activation of the right brain can manifest in the fine movement of the left side of the face and the throbbing of the left eye. When a man sees something with his more analytical, discriminating nature, it is his left brain that is active, and this activity can manifest in the right side of the face and in the throbbing of the right eye. This is a possible physiological explanation of why these and other omens are positive for a man or for a woman, depending on whether they appear on, or from, the left or right side.

We have given this example to suggest that even such things as omens and intuition can be understood from a physiological perspective. The intuitive feeling is a deep and subtle state of awareness in which an individual can be guided by fine perception. The intellect is very sharp and able to connect many diverse factors, so that even without conscious analysis one can ‘feel’ what is going to happen. Even a very small ripple in Natural Law can be detected by a cosmic brain in Transcendental Consciousness. There is an old expression, ‘a hint is enough for the wise’, which means that for the wise—who are awake in their self-referral consciousness—a very subtle omen or indication is enough to alert them. Earlier we mentioned that both Bharat and Dasharath encountered omens. These occur because everything in creation is interconnected—every individual is connected to all of Nature, and it is possible for us to possess an awareness of what is going to happen to us at any time and place.

Omens may be quite complex, sometimes giving an indication in one direction and another time giving an indication in a completely different direction. Our purpose here is to reveal that the descriptions of omens in the Rāmāyaṇ have a scientific and physiological basis. For the purpose of scientifically evaluating future trends from present indicators, Maharishi has made the complete science of the Vedic Technology of Jyotish available to us.

***Yuddha Kāṇḍ, Sarga 6–20 and 24–41:***

## Rāvaṇ Consults with His Advisors

While Rām was considering how he could cross the ocean to Lankā with his *Vānara* army, Rāvaṇ was discussing the upcoming battle with his advisors. Vibhīshaṇ suggested to Rāvaṇ that he return Sītā and not enter into further conflict with Rām, but Rāvaṇ refused to listen to his younger brother. Realizing that he would never be able to change his brother's mind, Vibhīshaṇ left Lankā and became Rām's ally.

After arriving at Rām's encampment, Vibhīshaṇ informed Rām of the strengths and weaknesses of Lankā, Rāvaṇ, and various *Rākshasas*. This precisely corresponds to the activities of the dentate nucleus. The dentate nucleus is the only structure in the cerebellum that sends information about the state of the cerebellum to the higher areas of the brain, its primary role being to convey information from the lateral hemispheres of the cerebellum to the higher areas of the brain via the thalamus.

When Vibhīshaṇ left Lankā and surrendered to Rām, it enabled Rām to properly understand and control the activities of the cerebellum. It is clear that this connection is an important evolutionary step, necessary for the central nervous system to control the physiological activity of the cerebellum.

Rāvaṇ at this point was emaciated due to Sītā's rejection, because even though she was his prisoner she refused to submit to him. This indicates a lack of blood flow to the cerebellum. Whether Rāvaṇ corresponds to improper activity or to a cancerous growth, the circulatory system was not nourishing him.

A cancerous growth can be destroyed by stopping blood flow to it, and some approaches today aim at shunting the blood away from the cancer in order to destroy it. In this instance, Rāvaṇ's emaciation relates to the lack of support from the cardiovascular system through oxygen and blood—from the nourishing power of Sītā. Rāvaṇ believed that he possessed Sītā, but it was an illusion—she was imprisoned in the Ashok garden, but he had no access to

her. Indeed, Sītā can be credited for helping win the battle of the Rāmāyaṇ, for if she had surrendered and agreed to become Rāvaṇ's queen, Rām could not have destroyed Rāvaṇ and the battle would have been lost. Rām and Sītā are one. Their separation is the illusion that creates suffering.

### ***Yuddha Kāṇḍ, Sarga 21: The Crossing to Lankā***

While the *Vānara* army waited to cross to Lankā, Rām spread blades of kusha grass on the shore of the sea, and joining his palms out of respect he requested help from Sāgar, the *Devatā* presiding over the ocean. After waiting patiently for three days without a response, Rām became angry and threatened to burn up the ocean with his arrows. Drawing his great bow, he released arrows into the sea until a great storm arose, whereupon Sāgar finally surrendered to him, pledging to support the construction of a bridge to Lankā.

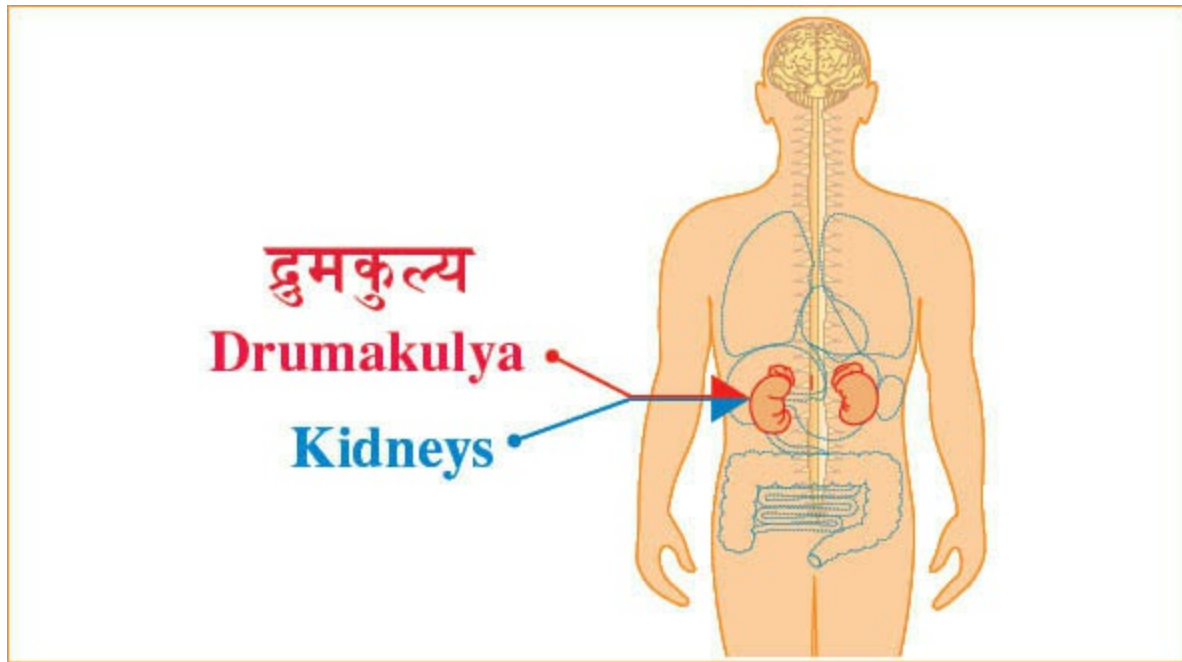
This story describes the central nervous system (Rām) sending neural impulses out to the vessels and other areas, and gaining control over all the fluids of the body. Fluid homeostasis is a delicate and vital part of physiological functioning. The body of a human adult comprises about 60 per cent water, which is distributed between cells, their surrounding environment, as well as blood and lymph circulation. This intra- and extra-cellular water distribution—along with the exact concentration of minerals, ions, vitamins, nutrients, and other factors—is critical to the proper functioning of every cell and organ of the body. This is the reason that Sāgar's cooperation was so necessary for Rām, and why he waited patiently to gain his support.

In primitive life forms, such as bacteria and other simple unicellular and multicellular organisms, the mechanisms that maintain water balance are very simple. As we climb the evolutionary ladder, these mechanisms become increasingly complex and sophisticated, and include the ability to retain or excrete water under varying environmental conditions and circumstances. Adequate hydration is vital for the different parts of the body to function properly.

The central nervous system plays an important role in the control, management, and distribution of water resources, including behavioural patterns of drinking, as well as the control of cellular mechanisms. This role also involves a complex set of structures and mechanisms that adjust blood flow to the various organs at various blood pressures, as well as the regulation of fluids through the excretory mechanisms in the kidneys. This is the significance of Sāgar surrendering himself to Rām—it is the establishment of the control of the central nervous system over the body's water resources.

To gain control of the ocean Rām discharged the *Brahmā-Astra*, an arrow or missile presided over by Brahmā. Once the *Brahmā-Astra* is released it cannot be recalled, so Rām asked Sāgar where he would like it to land. Sāgar requested that Rām send it to a northern region called Drumakulya. Drumakulya, also known as Marukāntār, was a place where sinful marauders had poisoned the land and water, and so Sāgar asked Rām to send the *Astra* to that site of toxic materials.

Rām's arrow immediately flew there and purified the area, which corresponds to a description of kidney function. The toxic materials located at Drumakulya correspond to those that collect in the kidneys, including by-products of digestion, immune activity, and drug metabolism. Any and all of these could have poisonous effects if they are too highly concentrated in the blood.



**Figure 15.15 The area of Drumakulya corresponds to the kidneys.**

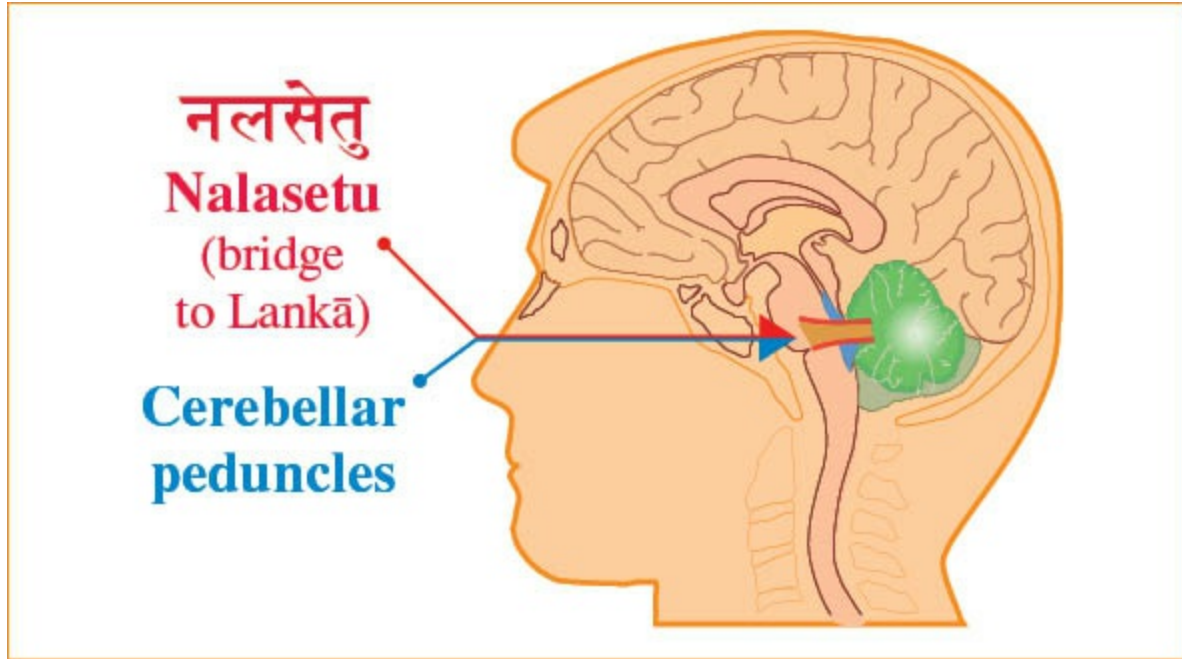
The kidneys' special function is to filter toxic materials and expel them from the body. Tubules and cavities within the kidney collect fluid coming from plasma, and filter out waste material to be released outside the body. Rām's purifying influence in this watery area refers to the removal of the toxic materials from the body via the kidneys.

If we analyse the story from the broadest perspective, we can imagine Sāgar delaying his response until Rām sent his *Brahmā-Astra* to purify part of the ocean. The kidneys, where toxins are removed and water balance is maintained, receive the *Brahmā-Astra* and are re-awakened and re-connected to the holistic activity of Rām, in harmony with total Natural Law.

Once the ocean was subdued, Nala, an expert builder, constructed a bridge to Lankā called *Nalasetu* (literally 'the bridge built by Nala'), over which Rām and his army advanced. *Nalasetu* represents the cerebellar peduncles, which include the inferior, superior, and middle cerebellar peduncles, through which all the inputs from the different parts of the spinal cord, brainstem, and brain

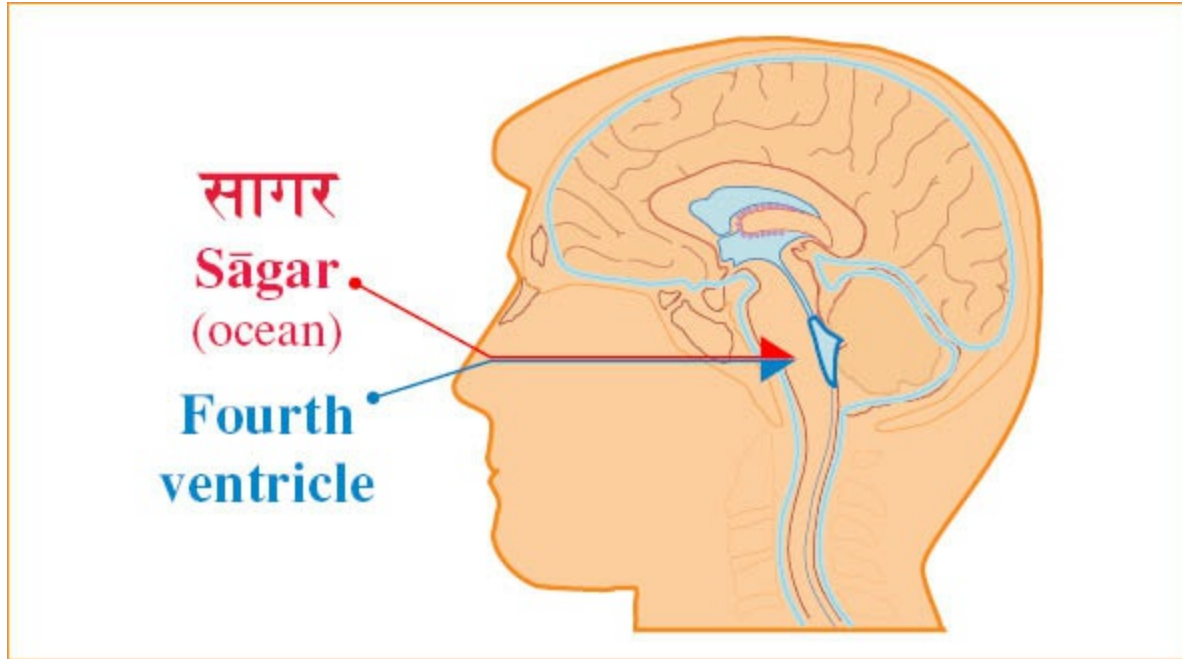


reach the cerebellum, and through which outputs from the cerebellum go out to different parts of the body. Sāgar, as the embodiment of the ocean, corresponds to the fourth ventricle, which contains the cerebrospinal fluid.



**Figure 15.16 Nalasetu (the bridge to Lankā) corresponds to the cerebellar peduncles.**

Rām's passage across the ocean over the bridge describes how the cerebral cortical areas extend their fibres and tracts directly to the cerebellum. These cerebral or cortical cerebellum tracts terminate in the cortex of the cerebellum itself, most of them passing via the pontine nuclei within the brainstem. We should remember that these brainstem nuclei correspond to *Rishis* that Rām encountered in his travels, whom we will consider in Chapter XVII.



**Figure 15.17 Sāgar (ocean) corresponds to the cerebrospinal fluid of the fourth ventricle.**

The bridge to Lankā may also be viewed from an historical and geographical perspective. Modern satellite images have discovered an ancient bridge lying deep in the ocean between Lankā and India.

The physical structures represented in the geography of the Rāmāyaṇ are found in our own human physiology. This concludes the first half of our analysis of the *Yuddha Kāṇḍ* and *Uttar Kāṇḍ* in light of human physiology.

### ***Footnotes***

1. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 148–150.

2. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 355–356.

3. The physiological correspondence of each of the ten incarnations of Vishṇu (Dashāvatār) have been identified in *Human Physiology: Expression of Veda and the Vedic Literature* (Chapter XI), including a detailed description of Narasimha that shows how he represents the junction area between the brain and brainstem.



# Chapter XVI

## *Yuddha Kāṇḍ*—The Battle Between Rām and Rāvaṇ

**W**e have now discussed approximately one third of *Yuddha Kāṇḍ* as well as most of *Uttar Kāṇḍ*. In this section, our focus will be on the last two thirds of *Yuddha Kāṇḍ*, which is concerned with the events before and during the battle between the armies of Rām and Rāvaṇ.

### *Yuddha Kāṇḍ, Sarga 24–36: Rāvaṇ's Spies Report*

In *sarga* 24 we read that Rāvaṇ sent spies to determine the strength of Rām's army. As we saw in our discussion of *sarga* 7 of *Bāl Kāṇḍ*, spies correspond to the sensory or input systems that carry information. The cerebellum has its own sensory inputs, which arrive from all levels of the brain and nervous system to inform the cerebellum about what is transpiring throughout the body, so that it can coordinate and adjust its activities to fulfil its goals. Rāvaṇ's desire to destroy Rām's army corresponds to the cerebellum's attempts to dampen inputs from the central nervous system and the peripheral nervous system by means of its own inhibitory outputs.

Rāvaṇ engaged one of his magicians to create the illusion of Rām's death, and brought the 'head' to Sītā with the intention of terrifying her, rendering her more vulnerable. The illusion was created within Lankā, indicating that Wholeness was not present, and that only a specific value remained—a value that had forgotten Rām, forgotten Totality. It is as though the cerebellum was requesting that the cardiovascular system lend its full support only to the cerebellum. Of course the body would collapse instantly if such a thing were to take place, which the cardiovascular system understands. At first Sītā was shocked and upset by the harsh illusion, but one of her *Rākshasī* guards assured her that Rām was still very much alive.

## ***Yuddha Kāṇḍ, Sarga 37–41: Sugrīva Attacks Rāvaṇ***

Prior to their first encounter with Rāvaṇ's army, Rām, Sugrīva, and a few others ascended a nearby mountain peak to observe the movements of Rāvaṇ's troops. From this vantage point they saw Rāvaṇ sitting on top of a gate, which so infuriated Sugrīva that he leaped down to the gate, knocked off Rāvaṇ's crown, and wrestled with him for some time. Becoming aware that Rāvaṇ was about to employ his supernatural powers to overcome him, Sugrīva then leaped back to Rām. Rām was displeased with Sugrīva's actions, and told him that as the leader of the *Vānara* he should not take such risks.

Sugrīva and the *Vānara* correspond to the pituitary gland and hormonal system.<sup>1</sup> Rāvaṇ is a powerful representation of the entire cerebellum, and as we will later see he can only be subdued by Rām—the battle will be decided by the central nervous system, not by the endocrine system.

The *Vānara* played a major role in locating Sītā, with Hanumān ultimately finding her and reporting back to Rām. Now it is time for Rām to take over the cerebellum by creating neural connections with it. We will see the details of these connections and interactions in the ensuing battle. Hanumān, as we know, did not attempt to destroy Rāvaṇ and bring Sītā back to Rām. It is clear that the purpose of the upcoming battle is to re-establish order in the cerebellum (Lankā), not to destroy it, and for this the cerebellum must be placed under the rulership of Wholeness, which Rām alone can accomplish.

In the early embryologic stages of the nervous system's development, the hormonal system is very important for neural growth, and can therefore be critical for the cerebellum as well as for other parts of the nervous system. Indeed, the development of the physiology's form is intimately connected with the hormones. For example, the addition of a specific level of certain hormones at an early age has a strong influence on gender differentiation and can even alter the gender-specific appearance of the physiology. We also know that if hormones are not properly balanced, they can subdue or

diminish the growth of certain parts of the nervous system.

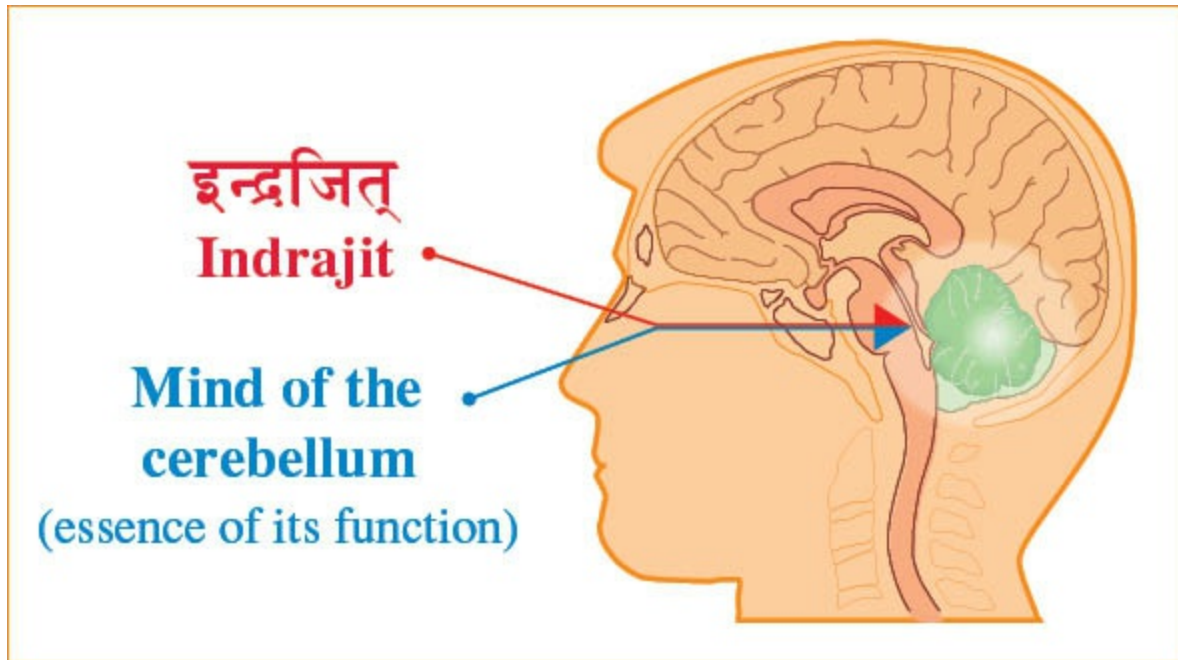
For this reason, *sarga* 34 of *Uttar Kāṇḍ* relates a story describing how Vālī, Sugrīva's brother, subdued Rāvaṇ and then later became his friend. At an early stage of development, the hormonal control system can have the upper hand over the cerebellum's expressions within the physiology. Later, the hormonal systems aid in the development of various structures of the nervous system, which corresponds to Vālī helping Rāvaṇ as a friend.

### ***Yuddha Kāṇḍ, Sarga 42–43: The Battle Between the Armies of Rām and Rāvaṇ***

The two armies finally positioned themselves outside the walls of Lankā, and in their first confrontation the *Rākshasa* leaders fought against their counterparts in the *Vānara* army. One of the most prominent fights pitted Rāvaṇ's son Indrajit against Angada, the son of Vālī. Before we examine this contest, let us briefly review the physiological correlations of Indrajit and Angada.

Indrajit was the son of Lankā's king, and possessed immense powers of magic and illusion. His name stemmed from his conquest of Indra, the king of the *Devatās*, who corresponds to the total human mind with control of the entire body. Indrajit, on the other hand, is the mind, or essence, of the cerebellum. His activities are the cognitive cerebellar functions, such as the ability to rehearse motor behaviour and the conscious assessment of errors in movement.





**Figure 16.1 Indrajit, the eldest son of Rāvaṇ, corresponds to the mind of the cerebellum (the essence of its function).**

As the son of Vālī, Angada was destined to take over the kingdom from Sugrīva. Angada is the essence of the pituitary gland and its activity, including the input to the pituitary gland via the pituitary stalk. Pituitary activity is capable of producing dramatic physiological changes, as we saw in Chapter XIII, and these are almost invariably accompanied by profound cognitive or mental transformations. For example, if there is a sudden increase in cortisol or adrenaline in the blood in response to an order from the pituitary, there may be fluctuations in mood that can lead to a state of psychological disturbance. Inappropriate activity of the pituitary gland can also lead to states of varying degrees of shock, paralysing both body and mind.

At the beginning of his battle with Indrajit, it seemed that Angada would be victorious. This is not surprising, since the pituitary gland—including the pituitary stalk—has the ability to compromise the functioning of the whole physiology, thus counteracting the cerebellum's ability to influence behaviour. The influence of the pituitary gland and stalk is indirect, as they

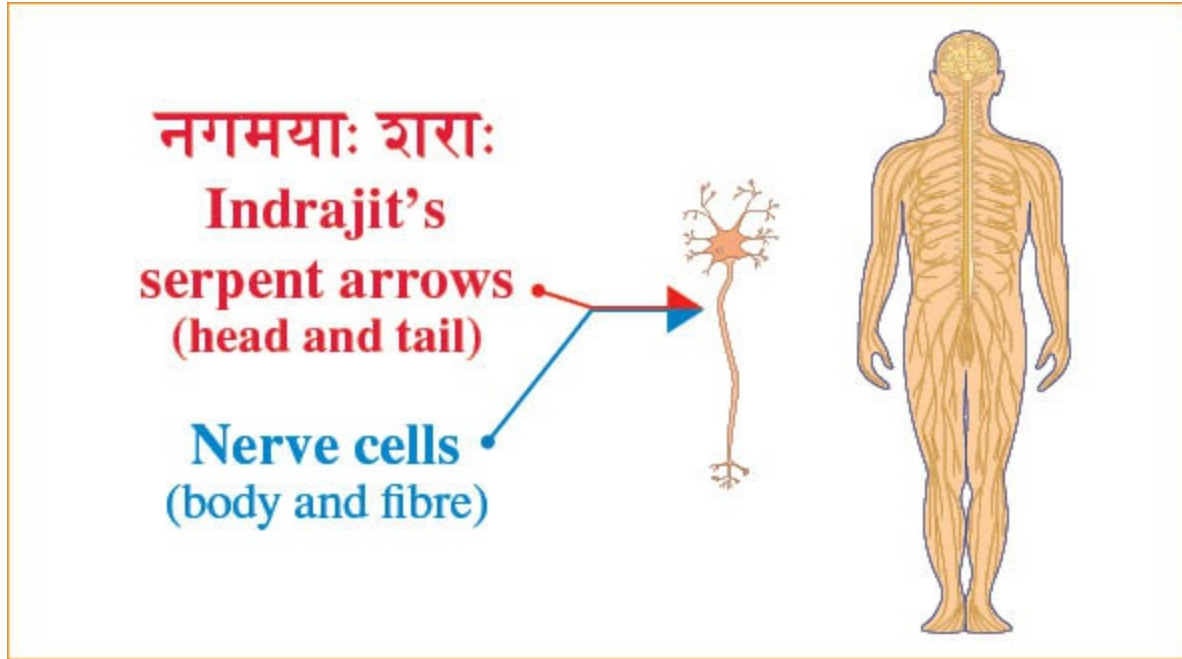
do not act directly to subdue the cerebellum; rather, they subdue the ‘essence’ of the cerebellum’s activity, Indrajit, by creating abnormal functioning in the whole physiology.

Indrajit recovered, however, and used his magic to become invisible and create more problems. The ability to become invisible points again to the subtle qualities of the mind. The mind of the cerebellum is able to hide because the essence of its activity is not physical, and is therefore not limited to any specific location. Although Angada was unable to destroy Indrajit in this battle, he was able to destroy Indrajit’s charioteer, who corresponds to the physical activity that supports the more subtle, mental aspect of the cerebellum. At this point in the evolution of the physiology it is not the responsibility of the hormonal system to control the essence of the cerebellar activity—it is not the responsibility of Angada to conquer Indrajit. This must be accomplished by the nervous system, by Rām and Lakshmaṇ.

### ***Yuddha Kāṇḍ, Sarga 44:*** **Indrajit Attacks Rām and Lakshmaṇ**

The fight between *Vānara* and *Rākshasas* continued into the night, when the strength of the *Rākshasas* was said to increase twofold. Earlier we discussed a number of biological cycles in the body, which may be useful in determining the most effective time of day to take certain drugs. This corresponds to the tendency of anomalies to be more resistant or refractory at night than during the day.

When Indrajit returned to the battle he was invisible. He opened by firing special ‘serpent arrows’ at Rām and Lakshmaṇ, pinning them with poisonous bonds and rendering them unconscious. This means that the cerebellum, through Indrajit’s actions, is able to immobilize the central nervous system, specifically the pre-motor activities of the cerebral cortex. Indrajit’s serpent arrows correspond to electrical messages travelling through different neuronal connections to the motor, pre-motor, and sensory motor cortices, rendering them unconscious.



**Figure 16.2 Indrajit's serpent arrows correspond to nerve cells.**

The mind generates all the actions and reactions we experience throughout life, because we create all activity from the level of thought. A thought can also lead to the activation of an emotion or desire, which translates itself into the secretion of hormones, or the generation of electrical activity within the nervous system. These in turn can produce a state of sleep, or unconsciousness. Indrajit is more subtle than physical matter, and thus he is a greater threat to the holistic functioning of the body.

### ***Yuddha Kāṇḍ, Sarga 45–46: Indrajit Continues to Overcome the Vānara Army***

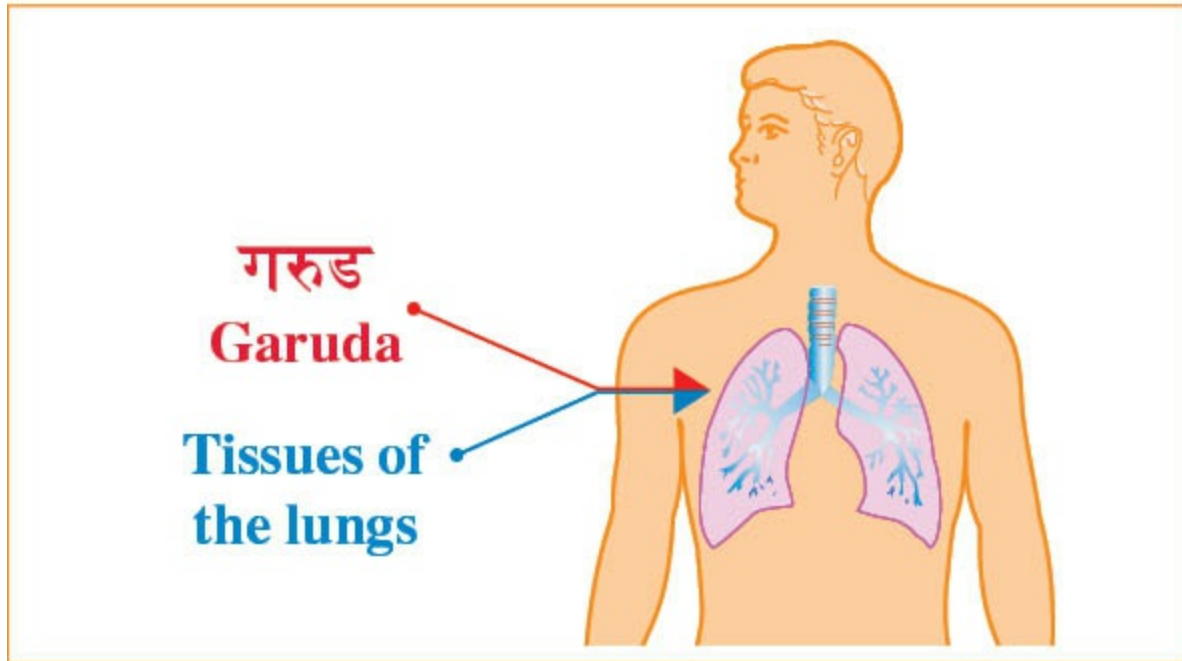
After Rām was pierced by Indrajit's serpent arrows the first time, he sent ten *Vānara* generals to locate Indrajit. Remaining invisible, Indrajit continued to wound and injure the *Vānara*, and pierce Rām and Lakshmaṇ with more arrows. The central nervous system activates aspects of the neuroendocrine and immune systems, represented by the *Vānara* generals, but because Indrajit corresponds to a nonspecific, hostile, abstract aspect of cerebellar activity, he is said to be invisible. The *Vānara* were annihilated because they

could not locate a concrete target. It was as if the veil of ignorance was so strong that it could hide even the Absolute, which explains why Rām is described as unconscious on the battlefield.

***Yuddha Kāṇḍ, Sarga 47–50:***  
**Garuda Awakens Rām and Lakshmaṇ**

The *Vānara* were grief-stricken at the sight of Rām lying unconscious. Sītā, who was brought to witness the battle by Rāvaṇ, fell into despair seeing Rām and Lakshmaṇ lying helpless on the battlefield. Sītā’s sympathetic *Rākshasī* guard again reassured her, and she was deeply relieved. *Rākshasas* can be negative or inhibitory inputs, but in this case the inhibitory input inhibits the inhibition, leading to a positive and useful result. Inhibition in the physiology is not necessarily a negative characteristic because it can be positive within the context of the whole. In the same way, *Rākshasas* are destructive by nature, but as we see here they can also be helpful. By destroying the illusion of Rām’s death a *Rākshasī* created a positive effect upon Sītā.

Rām and Lakshmaṇ were finally saved by Garuda, the king of birds. Garuda corresponds to the lungs, which are formed of connective tissue and smooth muscle in a shape that resembles the huge wings of Garuda. The lungs are the ultimate power that moves air with its life-sustaining oxygen in and out of the body. Garuda is the intelligence within the lungs that carries the life force, or vital energy *Prāṇa*, to the entire physiology. This corresponds to Garuda’s role as the king of birds and the bearer of Viṣṇu—the bearer of life. Garuda awakened Rām and Lakshmaṇ by bringing *Prāṇa*.



**Figure 16.3 Garuda, the king of the birds, corresponds to the tissues of the lungs.**

Indrajit used his magic to transform serpents into arrows that bound Rām and Lakshman. These serpents correspond to the nerves, which act together under the influence of the subtle activity of the mind of the cerebellum, and are thus able to silence the administrative centres of the brain. The long body of the serpent resembles the axon of the nerve, while the serpent's head is the nerve's body. By acting upon these nerves, Indrajit is able to create a state in which the sensory and motor cortex is unable to properly function.

The silencing of Rām can also be seen as part of a cycle of rest and activity, in which he experienced a profound level of total silence only to be awakened by the power of *Prāṇa*. His awakening represents a kind of shock therapy on the physical level, which takes into consideration the entire range of wholeness from its physical expression to its more subtle level.

This *sarga* informs us that the body can be tricked, and our consciousness deluded through physical means—it can be put to sleep, rendered unconscious, or even become intoxicated. If the body is intoxicated, then the

experience of *Brahm* is not available. Ultimately Rām fought a war in which he wanted to take both specificity and generality back into the Self by enlivening Sītā, total *Prakṛiti*, in the Self, for the total unfoldment of Unity Consciousness—Brahman Consciousness, wholeness of life.

### ***Yuddha Kāṇḍ, Sarga 51–59:*** **Rāvaṇ Momentarily Enters the Battle**

After Rām and Lakshmaṇ were awakened by Garuda, Rāvaṇ sent several *Rākshasa* generals and ministers to destroy the *Vānara* army. However, they were quickly despatched by Hanumān, Angada, and other *Vānara* leaders. Rāvaṇ then decided to enter the battle himself. After several forays in which he caused massive destruction to the *Vānara* army, he confronted Rām. Observing that Rāvaṇ was weak and fatigued, Rām told him to rest, become strong, and then return to fight.

We might well wonder why Rām would allow Rāvaṇ to rest rather than ending the battle immediately, and there are two physiological explanations. The first is that Rām needed to destroy all the *Rākshasas* in order to restore total balance—the cerebral cortex must be connected properly with all aspects of the physiology, including the cerebellum and its surrounding areas. The second is that in order for Rām to be completely successful, Rāvaṇ must manifest his maximum potential as he was being defeated, so that he would be connected with all relevant aspects of the physiology. In this way there would be the maximum exchange of arrows, or nerve impulses, with Rām. Rām wanted to take the full value of the cerebellum under his control, so that all the *Rākshasas* would be completely subdued.

In the battle between constructive and destructive forces, between silence and dynamism, between specific and general, each value must reach its maximum stage of alertness so that when they come together Wholeness is victorious—not merely over a few small inputs, but over everything. In this way, the total value of total Natural Law is established.



## ***Yuddha Kāṇḍ, Sarga 60–67:*** **The Defeat of Kumbhakarna**

Insulted by Rām, Rāvaṇ decided to wake up his brother Kumbhakarna. Kumbhakarna resides in the fastigial nucleus, which is located in the centre of the cerebellum, deep and adjacent to a place called the vermis. The fastigial nucleus has been associated with Kumbhakarna because of its relationship to the reticular formation in the brainstem. There are aspects of the reticular formation that have the potential to cause powerful and destructive actions within the physiology, including the loss of consciousness. As with all areas of the physiology, the connection between the fastigial nucleus and the reticular formation must be properly adjusted and placed completely under Rām's control.

When Kumbhakarna appeared on the battlefield he wreaked enormous destruction upon the *Vānara* army. At first even Rām's arrows had no effect, but by using more powerful arrows Rām severed Kumbhakarna's arms and legs. This corresponds to the physical restructuring of the connections between the fastigial nucleus and the brainstem. Connectivity in the brain is partly formed by the physical extensions of neurons called dendrites, which branch and connect with other neurons. These 'extremities' of the neurons correspond to the arms and legs of Kumbhakarna. Through these connections, neurons are able to receive excitatory or inhibitory messages. By modifying the type, placement, and number of these connections, new memory systems are created in the nervous system.

Research has shown that the connectivity between neurons is very flexible and can be adjusted: extensions can be created, eliminated, and rebuilt. Scientists refer to this flexibility in neural connections as neuronal plasticity. Short-term memory can become long-term memory through repeated stimulation, which leads to the formation of specific neural circuits. These circuits can be created by a number of mechanisms, one of which involves the production of special proteins that facilitate the passage of

neurotransmitters through the synapses, therefore favouring the flow of information along that pathway.

Kumbhakarna had a direct relationship with the sleeping state of consciousness in that he was kept asleep in order to limit his destructive influence. The removal of Kumbhakarna's limbs corresponds to an adjustment of the connectivity and the elimination of the proteins that facilitate the passage of neurotransmitters through the synapses. Until this point, Kumbhakarna's connections had a negative influence on parts of the brainstem, hindering the ability of the central nervous system to function holistically.

It is important to observe the sequence of Kumbhakarna's destruction, beginning with the removal of his limbs and ending with the elimination of his head. The result is the total eradication of his influence. When a neuron is not required, a similar destructive sequence can occur by first cutting off the neuron's extensions and then removing the cell body, or soma, resulting in the complete elimination of activity.

The fastigial nucleus has connections and influences upon certain neural pathways that extend over long distances, such as those reaching the higher parts of the brain via the thalamus. Physically these connections remain since they are important for certain circumstances, yet functionally they are placed under the control of the holistic plan of the physiology. The cerebellum always compares intention with performance, and measures the specific values of the performance in terms of its strength, distance, weight, and other factors discussed in Vaisheshik. This process of measuring and comparing must be in tune with wholeness. In this case the central nervous system ensures that the fastigial nucleus and all its connections to the higher and lower centres in the brain are functioning holistically. Only then will there be perfect functioning in every aspect of the physiology, and only then will Rām be able to subdue Rāvaṇ.

If Kumbhakarna had not been subdued physically, which means that the

fastigial nucleus connections were not put in proper order, then the correction of other aspects of the cerebellum corresponding to Rāvaṇ would not give Rām control of this delicate and important physiological activity. When Rām decided to put off his battle with Rāvaṇ, Rāvaṇ reacted by sending Kumbhakarṇa into battle. By restructuring the physiology, Rām performed his job in perfect sequential order. Natural Law must take the necessary steps of evolution to ensure that everything functions in its proper place and in the proper order.

***Yuddha Kāṇḍ, Sarga 68–71, 75–79, 93–98:***  
**Various Encounters Between**  
***Vānara* Chieftains and *Rākshasa* Leaders**

During the battle there were many individual skirmishes between various *Rākshasas* and *Vānara* leaders, such as Hanumān, Angada, and Nīla. We have seen that the *Vānara* correspond to the hormones and messengers of the endocrine and immune systems while *Rākshasas* represent anomalies—destructive or cancerous cells. In most of the passages the *Vānara* leaders subdued a *Rākshasa*, indicating that the actions of the endocrine and immune systems, along with the holistic functioning of the central nervous system, were successful in eliminating abnormalities—neurons are removed, remodelled, and reconstructed, and excess debris cleared away. When Kumbhakarṇa entered the battle, he killed and devoured many *Vānara*. In these instances, the anomalies were able to overcome the messengers of the endocrine and immune systems, and even consume them in a manner similar to cancer cells consuming surrounding cells.

We are told that there were a few moments when the dust became so thick that neither army could see, and as a result *Vānara* and *Rākshasas* accidentally killed members of their own armies. This describes clashes between immune cells and various anomalies, such as bacteria or cancer cells, in which the biochemical activity is so intense that not only are bacteria and cancer cells killed, but healthy messengers are also destroyed. This is the

case in the fight against infection, when normal white blood cells are also destroyed. Certain cells secrete lysozymes or destructive enzymes and these special types of chemicals attack the bacteria, but if they are secreted in large amounts they may also become toxic to the body itself.

We will see later that Rām revived all those who died in his army, and made them immortal. This quality of immortality corresponds to the ability of the body to revive and regenerate different cells and tissues. For example, a finger bleeds when it is cut, but the bleeding eventually stops and the wound closes and heals as the tissues build up again.

At one point Kumbhakarna became enraged by the rain of Rām's arrows, and losing all discrimination he began devouring the *Rākshasas* along with the *Vānara*. This corresponds to an anomaly such as a cancer cell that begins to grow and indiscriminately absorb nutrients and materials from the surrounding area, from both healthy as well as abnormal tissues.

There were several skirmishes in which a warrior was wounded or rendered unconscious but not killed. When Rāvaṇ first appeared on the battlefield, he wounded or rendered unconscious several *Vānara* leaders, and he and Lakshmaṇ also caused each other to become unconscious. Kumbhakarna made Sugrīva unconscious, then placed him under his arm and carried him away. Sugrīva, however, later awoke and tore into Kumbhakarna with teeth and nails. These encounters correspond to the ability of anomalous cells to inhibit, but not destroy, certain messengers sent by the endocrine or immune systems.

Rāvaṇ and Lakshmaṇ correspond to major areas in the brain. Their exchange of arrows represents the flow of neuronal impulses between these areas, with excitatory impulses neutralizing inhibitory impulses. Both falling unconscious indicates that the exchange of neuronal impulses has become so strong that one area is temporarily inhibited by the impulses of the other.

A neuron can be placed in an unresponsive state by inhibitory impulses from

another neuron. The technical term for this inhibition is ‘a state of hyperpolarization’, in which the nerve membrane is no longer able to generate nerve impulses. The neuron can become totally unresponsive for some time and yet be neither dead nor active, but as if unconscious. Indeed, the details of the different clashes can all be seen in terms of the activities of the immune, endocrine, and neuronal systems.

Rāvaṇ’s javelin caused Lakshmaṇ to become unconscious in two separate instances, and from this we conclude that a large number of inhibitory impulses from Rāvaṇ’s area of the cerebellum were able to totally inhibit Lakshmaṇ’s area of the brain. In the encounter between Kumbhakarna and Sugrīva, we again see that an anomaly in the cerebellum, represented here by Kumbhakarna, is able to utilize mechanisms via the brainstem, limbic system, and hypothalamus to inhibit the pituitary gland and render it helpless for a brief period. When Sugrīva awoke and tore into Kumbhakarna, he was displaying a physiological situation in which this inhibition is no longer effective, resulting in the mobilization of various toxic biochemical elements.

We find the repeated theme of a leader in Rām’s army, sometimes Rām himself, destroying a chariot and charioteer more than once before finally killing its occupant. The chariot represents the transport system, and a chariot becoming functional again signifies the renewal of a transport mechanism. This process of the destruction and renewal of a transport system may continue to occur until the essential agent, or the anomaly using it, is destroyed.

### ***Yuddha Kāṇḍ, Sarga 72: Rāvaṇ Recognizes Rām***

At one point Rāvaṇ recognized Rām as Lord Nārāyaṇ (Vishṇu), and immediately issued orders for Lankā’s defence. This is an interesting *sarga*, because Rāvaṇ, who is so specific and filled with rage, suddenly recognizes Rām as the incarnation of Vishṇu, who is Wholeness and Totality. Rāvaṇ was a powerful *Rākshasa* but he was not completely ignorant, and so was able to recognize the embodiment of Wholeness. Yet he continued to try to maintain

specificity until he was finally overtaken by Wholeness. This, in fact, was the purpose of Rāvaṇ's incarnation—his deep desire to be liberated from the curse of being repeatedly born as a *Rākshasa*.

Rāvaṇ experienced a moment of awakening, in which he realized that he was fighting against Wholeness, but he remained in battle because ultimately he wanted to give himself to Rām. There is an aspect of Rāvaṇ that was functioning properly, but he required the power of Wholeness in order to be connected to that reality, which was a new step of awakening, a new step of expression of Natural Law. We may remember the Vedic Expression that we have cited several times in preceding chapters, which brings out this principle of awakening:

नद्धद्योद्ध नद्धद्यो भद्धद्यति जायद्धदुमानः

*Navo-Navo bhavati jāyamānaḥ*  
(*Rk Veda 10.85.19*)

*In the process of transformation, or evolution,  
it is the Totality that is reborn again and again.*



***Yuddha Kāṇḍ, Sarga 73–74: Indrajit's  
Destructive Arrow and Hanumān's Rescue  
of Rām, Lakshmaṇ, and the Army of Vānara***

Rāvaṇ was disheartened by the loss of Kumbhakarṇa, but he continued to send his sons into battle. After the *Vānara* generals killed them one by one, Indrajit stepped in and assured Rāvaṇ that he himself would lead the army to destroy Rām and the *Vānara*. Using a special arrow bestowed upon him as a boon by Lord Brahmā, Indrajit caused Rām's entire army, including Rām and Lakshmaṇ, to fall to the ground unconscious. Only Hanumān was able to save everyone, by bringing special healing herbs that grew on a mountain in the Himālayas. He flew swiftly over the sea and across the continent, but was unable to locate the herbs, and so returned bearing the entire mountain.

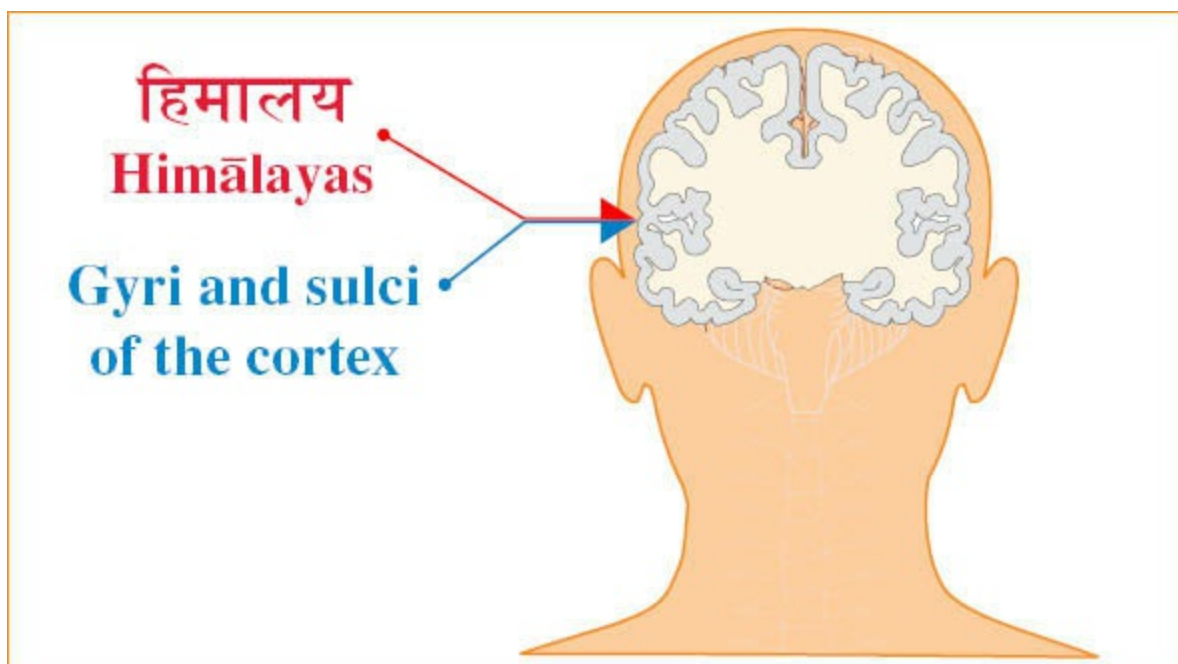


**Figure 16.4 Hanumān brings the mountain of herbs to restore consciousness to Rām and Lakshmaṇ.**

Hanumān as the holistic value of the hormonal system embodies the total value of Natural Law—the field of all possibilities—and he always ensures that every specific value is supported by the total potential of Natural Law. And we know that the human body contains its own mechanisms, including different hormones, neurotransmitters, factors, cofactors, and enzymes, which are constantly engaged in healing the body. Earlier it was Garuda who rescued Rām, but this time it was Hanumān who brought the physiology back to consciousness. It is as though a person became unconscious through toxic poisoning and the only means to restore consciousness was through an herbal

remedy from the Himālayas. The Himālayas are said to be the abode of the *Devatās*, and correspond to the mountain and valley-like convolutions of the cortex, called the gyri and sulci.

It is as if Rām allowed himself to be placed under the influence of the local activity of the cerebellum before overcoming it, which again highlights Indrajit's ability to create illusion. The only way to restore balance is for Rām to be revived by an element from the area where the *Devatās* reside—the Himālayas. The herbs correspond to neurotransmitters released from the cortex—the Himālayan mountains and valleys. These neurotransmitters create neural inputs to the cerebellum, which resulted in the revival of Rām and his army.



**Figure 16.5** The mountains and valleys of the Himālayas correspond to the gyri and sulci of the cortex.

Hanumān, as the hormonal system, was not able to revive Rām and Lakshmaṇ by himself, but by bringing the entire mountain with all its herbs he created the restoration of activity—awakening the endocrine system within the neuroendocrine axis. This awakening is not initiated by the

nervous system, but by the endocrine system.

Hanumān revived the body's capacity for self-healing, self-awakening. Rām was never dead, for Wholeness can never be completely absent, but there can be moments of unconsciousness in which Wholeness seems to have disappeared, as in a comatose state.

The physical body must function properly in order for us to be able to live Wholeness, Unity Consciousness. It is the body's own inner intelligence that guides the proper functioning of a healthy physiology. Therefore the healing power of the herbs comes from within ourselves. Hanumān was the mechanism that activated the healing power by bringing herbs that enlivened the inner intelligence of those who had been rendered unconscious. And not only did the herbs revive Rām and Lakshmaṇ, they also revived the entire army of *Vānara*.

The power of Indrajit's arrows even caused many of the *Rākshasas* to fall unconscious, but their bodies were destroyed and therefore could not be revived. Neurotransmitters create actions upon specific receptors, corresponding in this case to Rām's army. When Hanumān brought the herbs from the Himālayas, only positive values were revived—the dead *Rākshasas* were not restored because Rāvaṇ had already ordered their bodies thrown into the sea. This means that the by-products of metabolism had already been discarded as toxins and removed from the body.

The newly revived *Vānara* burned and destroyed Lankā according to Sugrīva's command. Physiologically this is similar to Hanumān's earlier destruction of Lankā, except that now the neuroendocrine system is more involved, and has activated other factors in the elimination of anomalies in this area.

### ***Yuddha Kāṇḍ, Sarga 80–83: Indrajit's Māyā***

Indrajit also created an illusionary figure of Sītā and mercilessly 'slayed her'.

This is another example of the mind's ability to create illusion—*Māyā*—which can create imbalance, fear, and grief. Even Rām was shaken when faced with such an illusion. Reality is different in different states of consciousness, and in this situation the illusion created by Indrajit's powerful, negative force upset the physiology's activity to the point of jeopardizing the very process of evolution.

There are phases in the ongoing development of consciousness during which a veil seems to be drawn between Wholeness and its Nature, its *Prakṛiti*. When Sītā was shown that Rām was dead, it was as if *Prakṛiti* believed that *Purusha* no longer existed. Later the role was reversed, and Rām—*Purusha*—was tricked into thinking that *Prakṛiti* had vanished. This is a critical transition point, during which memory must be maintained, otherwise illusion creates the appearance of the loss of the essential connectivity between the wholeness of *Purusha* and the wholeness of *Prakṛiti*. With the loss of this reality comes damage to the proper sequence in the evolution of life. Both illusions are momentary and pass away immediately, but we see from this example that it is possible for any individual to completely forget that *Purusha* and *Prakṛiti* are one and the same—inseparable.

When *Prakṛiti* is exposed to the illusion that there is no *Purusha*, a viewpoint emerges that places no trust or value in Wholeness, in the Self, and one is totally overshadowed by the specific values of *Prakṛiti*. The result of this distorted perspective is confusion, pain, fear, and suffering, because life appears to be separate from Wholeness. The other illusion, the belief that *Purusha* exists but *Prakṛiti* is destroyed, can lead to the belief that the relative has no intrinsic value.

Maharishi's historic revival of Vedic Knowledge provides a priceless opportunity for us to understand that both values are truly Wholeness. The experience of pure consciousness, pure Being, is the direct experience of the Self of everything, and this experience removes ignorance and awakens the *Purusha* value in our life. Maharishi has so often explained that the entire

manifest creation is Wholeness, and if we first establish our awareness in the Self, then the realization unfolds that all physical manifestation is nothing but That—the same pure Being, which we experience as our own inner Self. The unmanifest is the basis of all that is manifest, and by bringing the unmanifest to the surface value of life we see that *Prakṛiti* is *Purusha* and that *Purusha* is *Prakṛiti*.

In Chapter I, we discussed how Veda is the Constitution of the Universe, and how the mechanisms of transformation and evolution are inherent within Veda.<sup>2</sup> The structures and functions of the physical body are nothing but unmanifest pure Being expressing itself in a physical form. Revealing the unmanifest within the manifest is very important because *Māyā* can create the illusion that one value is disassociated from the other. This creates what we can think of as pain in the heart of the Absolute. This is what Rām felt when he was presented with the illusion that Sītā had been destroyed, and it is what Sītā felt when she was confronted with the illusion that Rām, or *Purusha*, did not exist.

A complete comprehension of their experience helps us grasp the dynamics of the interactions between these complex levels of reality. If we want to consider the phenomena on the physical level, we can say that the central nervous system and the cardiovascular system are so intimately related that one truly is the other, for everything is Wholeness. On a physical level they apparently perform different functions and play different roles, but one does not exist without the other.

### ***Yuddha Kāṇḍ, Sarga 84–91: Indrajit's Defeat***

Near the end of this phase of the battle Indrajit was finally slain by Lakshmaṇ. Vibhīshaṇ had asked Lakshmaṇ to kill Indrajit, since it would not be appropriate for him to kill his own nephew. Vibhīshaṇ and Indrajit are both located in the cerebellum, and one part of the cerebellum cannot destroy another, because they have a common origin and ultimately a common role. Therefore Vibhīshaṇ, who has outputs to higher centres in the brain, must ask



Lakshman to perform this task.

Vibhīshan informed Lakshman that Indrajit had received a special boon of immortality with two conditions: first, before going into battle he must always perform a specific *Yagya*. This indicates the importance of always remaining connected to the Self. As long as Indrajit was connected to the Self, he could not be vanquished. Second, Indrajit must always be seated in his chariot, which symbolizes the requirement that he remain established in pure consciousness, and not depart from it by standing, walking, or even having the thought of his strength coming from himself. On the transcendental level he was indestructible, but he needed to act totally in accordance with Natural Law—if he behaved in perfect accord with Natural Law he would be truly immortal. It was necessary for him to always remember that any strength of action came from the subtlest field of life, the Self. When this was his reality, Indrajit could not be vanquished.

Once Lakshman possessed this information, he was able to prevent Indrajit from performing the necessary *Yagya*. After a long and dramatic encounter in which many powerful arrows were exchanged, Lakshman, with the help of Vibhīshan and the *Vānara*, was able to destroy Indrajit's chariot and slay him. The fact that Indrajit was defeated by Lakshman rather than by Rām indicates that once Indrajit lost the self-referral reality, he could be vanquished by Rām's representative. This means that he was vanquished by the occipital lobe, in which Lakshman is present.

Everything must be done at its proper time and in its proper place. When Indrajit performed his *Yagya* he surrendered to a Vedic *Devatā*, and thus acted in tune with Natural Law. When he did not fulfil this requirement, he was then acting as an isolated value, not in tune with true immortality, and was therefore subject to destruction. This emphasizes the importance of having a proper intention—proper *Sankalpa*—and of proper performance of a *Yagya*, so that specificity does not overtake our thinking.

At the end of the battle one of the *Rishis* told Rām that he had been most

impressed that Lakshmaṇ had destroyed Indrajit. The *Ṛishi* was in effect telling Rām that he understood the ability to overcome specific parts of the physiology, but that to subdue the mind of the cerebellum was a truly supreme act of power. In this way we learn that Indrajit possessed a great power that even Rāvaṇ did not have.

The contest between Rām, Lakshmaṇ, and Indrajit took place on the physical level, but ultimately the great battle was resolved on more subtle levels that underlie the physical, for it is from the more profound levels that change occurs. Accordingly, the physiology is not merely physical matter, but includes deeper values of Natural Law's expressions. On the most subtle level the physiology is made of unmanifest pure Being, which expresses itself into the ego, the intellect, the mind, the senses, and the physical body. When one is established in Pure Being, pure consciousness, action is naturally fulfilling and in tune with Natural Law.

### ***Yuddha Kāṇḍ, Sarga 92: Rāvaṇ's Intent to Kill Sītā***

With his son Indrajit gone, Rāvaṇ decided to kill Sītā, but his minister Supārshwa persuaded him to direct his anger towards Rām. Murdering Sītā would certainly not help anyone because destroying the cardiovascular system would annihilate the entire physiology, including the cerebellum, i.e., himself.

As we have seen, the war was between the holistic values of Natural Law, represented by Rām, and the specific, misguided, and deranged aspects represented by Rāvaṇ. In this context the specific value was calling for a new level of wholeness, a new level of growth— Rāvaṇ was inciting Rām to create a completely new state of development. Killing Sītā, the embodiment of *Prakṛiti*, would obviously be counterproductive, because destroying *Prakṛiti* would eliminate all manifestation. Since Rām is Wholeness, destroying *Prakṛiti* simply means that *Prakṛiti* comes back to Rām.

## ***Yuddha Kāṇḍ, Sarga 99: The Final Battle Begins***

By now, Kumbhakarna, Indrajit, and most of Rāvaṇ's generals had been killed, and Rāvaṇ decided that the time had come for him to again enter the battle against Rām. This final confrontation between Rām and Rāvaṇ marks the climax in their struggle against each other.

As the two great opponents faced each other, there was an uninterrupted exchange of arrows—Rām discharged a powerful arrow that was diverted by Rāvaṇ's arrows, and Rāvaṇ launched one that was destroyed by Rām's arrows. This confrontation obviously takes place in the nervous system and involves the exchange of electrical impulses originating from different sources, which travel to different nuclei within the central nervous system.

Rāvaṇ corresponds to the cerebellum, which sends impulses to various parts of the brainstem and brain, including the spinal cord. And Rām controls the central nervous system, which sends impulses to all parts of the physiology, including the cerebellum, brainstem, and spinal cord. These inputs and outputs from the brain and cerebellum must be properly adjusted and coordinated, and this takes place through the neutralization and rebalancing of different inputs.

The battle between Rām and Rāvaṇ was highly specific in both sequence and location. Rāvaṇ went to the vicinity of the Sun and the Moon, with the Sun corresponding to the thalamus and the Moon to the hypothalamus.<sup>3</sup> Near the thalamus and the hypothalamus is a structure called the red nucleus, which along with the area surrounding it is the location of the final battle.

The name 'red nucleus' comes from its reddish tint, and red has the quality of *Pitta*, or heat, indicating a fiery element. The red nucleus receives inputs from both the cerebral cortex, Rām, and the cerebellar cortex, Rāvaṇ. The red nucleus also has various extensions and connections to the brainstem, spinal cord, and cerebral cortex.

Not far from the red nucleus are other important structures, such as the mammillary thalamic tract, the medial forebrain bundle, the anterior commissure, the mammillotegmental tracts, the cingulate gyrus tracts, the limbic system pathways, and the septal nuclei. The area of the final battle extends in several directions around the red nucleus, including the area of the subthalamus, since the text mentions that Budh (Mercury) was observing the battle.

Many of these structures are involved in the expression of emotions, and are connected to the hormonal, sensory, and motor systems. Some of the abnormal desires and emotions we have encountered in the Rāmāyaṇ are forms of psychological and psychiatric disorders connected to this area, and therefore the intense activity required Rām's control in order to be completely in tune with Natural Law.

### ***Yuddha Kāṇḍ, Sarga 99–101: Features of the Battle***

Many features are described in the battle area, which correspond to the nature and qualities of this part of the physiology. For example, there is a reference to Rāvaṇ moving in circles around Rām in his chariot, and in the area of the red nucleus there are specific tracts and neural circuits that form circles, even circles within circles. Also, some of the arrows are described as having crescent heads resembling serpents, which correspond to crescent shaped structures such as the fornix and the cingulate gyrus. Sitting a bit higher in the brain is the caudate nucleus, which also looks like a serpent with a large head and a long tail, and which we have previously identified with Rāhu and Ketu.<sup>4</sup>

One of the most important arrows that Rāvaṇ hurled during the final battle was obtained from Rāhu. With this missile Rāvaṇ invoked the qualities of the caudate nucleus in which Rāhu is present, and we are told that it had a devastating influence on the *Vānara* (the hormonal system). Rām and Lakshmaṇ, however, had their own extraordinary weapons and were able to annihilate even this powerful negative effect.

Rāvaṇ hurled his javelin at Lakshmaṇ rendering him unconscious, and Rām saved his brother by chasing Rāvaṇ away. Hanumān again flew to the Himālayas to bring a second mountain of herbs to revive him, which is similar to the previous situation in which Rām, Lakshmaṇ, and the *Vānara* army were rendered unconscious by Indrajit's arrows. Hanumān saved them by bringing herbs from the Himālayas—neurotransmitters from the cortical areas.

This final battle illustrates the creation of connections in the physiology and the establishment of order in entire systems, such as the endocrine system. As we near the final confrontation between Rāvaṇ and Rām—the conflict between abnormal, destructive, or imbalanced forces and balanced, constructive forces—everything is put in its proper and most ideal place.

### ***Yuddha Kāṇḍ, Sarga 102: Indra's Chariot***

Towards the end of the battle Indra gave his chariot to Rām. Indra's chariot represents the chariot of the mind. This signifies that Rām was operating on a more subtle level of activity, in which he needed to act on input from the entire nervous system. This final confrontation does not correspond to the interactions of any single nerve tract or connection, but rather to the entire central nervous system. The battle has moved beyond fragmented activity, beyond any single aspect of the nervous system, to the total involvement of the physiology.

### ***Yuddha Kāṇḍ, Sarga 103–104: Rāvaṇ's Charioteer Momentarily Withdraws***

At one point in the confrontation between Rām and Rāvaṇ, Rāvaṇ's charioteer pulled away from the battle. Rāvaṇ was of course furious, but the charioteer explained that he could see Rāvaṇ's deep fatigue, and he felt that he must remove him from the battle to rest. The red nucleus, where the battle is taking place, connects to the facial nucleus and the muscles of the face as well as to structures relating to facial expression. The charioteer saw Rāvaṇ's

face, noted his extreme fatigue, and removed him from the battlefield for a short rest. It is interesting that the area controlling facial expressions is the same area in which the battle is taking place.

The red nucleus also has a wide range of outputs to the spinal cord, which return to the cerebellum through the nucleus interpositus, and from the brain stem to the nuclei of the trigeminal tract and the facial nucleus, which controls the facial muscles and facial expression. Any stress, strain, or fatigue in this area can be seen on the face. We have all seen fatigue or worry on the face of another, and we know that facial expressions reflect the relative inner state of the body. Almost an entire *sarga* revolves around Rāvaṇ's fatigue and his temporary withdrawal from the battle. This passage reflects the need we all have to occasionally pull back and remove ourselves from activity, and more importantly to regularly turn back to the Self. This is what the charioteer does for Rāvaṇ. Rāvaṇ, however, insisted on continuing the battle, which on the most profound level means that he wished to finally surrender to the glory of Rām. His deep, subconscious desire was to be killed by Rām and be overtaken by Wholeness.

### ***Yuddha Kāṇḍ, Sarga 105–106: Ṛishi Agastya's Aid***

*Sarga* 105 describes the appearance of Ṛishi Agastya, who had been watching the battle with all the *Devatās*, and who now appeared to Rām on the battlefield to instruct him in an eternal secret that would guarantee him victory. His gift to Rām was a *Stotra* (hymn), which is recited to this day to gain the blessings of Sūrya, the Sun. Ṛishi Agastya addressed Rām as follows:

राम राम महाबाहो शृणु गुह्यं सनातनम्  
येन सद्बर्धनरीन्द्रद्यत्स समरे द्विद्यजयिष्यसि

*Rām Rām Mahābāho shṛiṇu guhyaṁ sanātanam  
yena sarvān arīn Vatsa samare vijayishyasi*



(Yuddha Kāṇḍ, 105.3)

*Rām Rām, O Mighty Armed, listen to this eternal secret, by which you will conquer all enemies, Dear One.*

Rishi Agastya began teaching Rām the *Āditya-hṛidayam*, a hymn that would enable him to engage the Sun, the life-giving ruler of the solar system, which represents the eternally silent rulership of the administration of the universe. Rishi Agastya explained the secret as follows:

आदित्यहृदयं पुण्यं सद्बर्धशत्रुद्विघ्नाशनम्  
जयाद्विघ्नं जपेन्नित्यमक्षय्यं परमं शिविद्विघ्नम्  
सद्बर्धमङ्गलमाङ्गल्यं सद्बर्धपापप्रणाशनम्  
चिन्ताशोकप्रशमनमायुर्द्वर्धनमुत्तमम्

*Āditya-hṛidayam puṇyam sarva-shatru-vināśhanam  
jayāvahan japi nityam akshayyam paramam shivam*

*sarva-mangala-māṅgalyam sarva-pāpa-praṇāśhanam  
chintā-shoka-prashamanam āyur-varadhanam uttamam  
(Yuddha Kāṇḍ, 105.4–5)*

*You should recite the Āditya-hṛidayam—the heart of the Sun—which contains supreme merit, is the destroyer of all enemies, the bearer of victory, eternal, imperishable, a supreme blessing, the most auspicious among the auspicious, the destroyer of all sin, the remover of anxiety and sorrows, and a supreme means for the growth of life.*

The *Āditya-hṛidayam* is extremely significant in terms of the holistic value of Rām's behaviour. The Sun corresponds to the thalamus, the gateway to the entire brain. All sensory inputs, even those from the cerebellum and spinal cord, enter the higher centres in the brain through the thalamus, which adjusts

and coordinates all inputs. The thalamus is like a master switchboard, receiving inputs from the brainstem area where the *Ṛishis* reside, and conducting information to the higher centres, where the *Devatās* reside. Without the awareness of the totality of these inputs—without knowing what Rāvaṇ was doing—Rām would not be able to triumph in this final battle.

By going to the heart of the Sun, Rām established himself in *Brahm*, which not only includes pure, flat, Being, but which is the total value of Absolute and relative together—*Purushottam*—all specificity and all generality. To fully understand and take over Rāvaṇ, Rām needed to encompass all the specific values, he needed to be omnipresent—present at every point, recognizing the existence of the point and the existence of all points together.

When we go to the heart of the Sun within our physiology, we go to the heart of the thalamus. The thalamus is the lamp at the door that can see the specific and the holistic. This is the Nyāya<sup>5</sup> value within everyone, which is able to see all specific and all holistic values at the same time. Agastya explained to Rām that he must be aware not only of Wholeness but also of all the details, all the specific values of life, and that is available in the heart of the Sun. Accordingly, in unfolding the *Āditya-hṛidayam* Ṛishi Agastya enumerated the full range of the Sun's qualities, from the holistic (*sarvadevātmako—He is the Self of all the Devatās*) to the specific (*sahasrārchiḥ ... timironmathanaḥ—He has a thousand rays and He is the destroyer of darkness*).

Rām's invocation of *Āditya-hṛidayam* describes the central nervous system in effect 'honouring' the thalamus as totality. On this basis, Rām was able to fight and conquer the ruler of specificity, Rāvaṇ. This battle depicts the conflict between the level of voluntary, conscious, sensory experience and the level of non-voluntary, instinctual, aggressive, unconscious, emotional experience—between the site of isolated values and the site of holistic values.

It is interesting to note that Agastya gave Viṣṇu's bow to Rām, which Rām then used to kill Rāvaṇ. Agastya represents the nucleus in the brainstem that watches over the entire activity of the cerebellum. As a *Ṛishi* he doesn't act,

but witnesses, inspires, and coordinates all action. He understands the complete picture of what is taking place and what is required. All the inputs from the central nervous system, as well as those from the cerebellum, are integrated via the olivary nucleus (Agastya), which sends its fibres to the cerebellum. These fibres are called mossy fibres and carry powerful excitatory inputs that go to the granular cells of the cerebellar cortex, exciting and awakening them. The olivary nucleus is a link between the cerebral cortex and the cerebellar cortex, which explains why Agastya assumed a role in helping Rām destroy Rāvaṇ, so that Rām could regain control of the cerebellum in order for evolution to be complete.

### ***Yuddha Kāṇḍ, Sarga 107: Rām Reviews His Previous Encounters***

The final battle between Rām and Rāvaṇ continued for many days and nights. As Rām continued to cut off each of Rāvaṇ's heads, another immediately appeared in its place. Rāvaṇ's heads are located both on a cellular level and in the cerebellum itself. On the cellular level, the reappearance of the head corresponds to the phenomenon of resistance to the treatment of an anomalous cell.

On a more abstract level, when Rām placed his attention on one of Rāvaṇ's heads, he was considering one specific value of that ultimate value of specificity. When he turned his attention to the next head, it was as if Wholeness, or *Purushottam*, also turned its attention to the next specific value. When this shift of the attention of Wholeness took place, then the previous specific value was able to manifest as specific again, and so another head of Rāvaṇ emerged.

Thus Rām continued to place one aspect of the cerebellum under his control, but when he moved to another he found that the previous one was lost again to Rāvaṇ's control. The ultimate control of cellular or cerebellar anomaly is holistic, as described in the final battle scene when Rām at last killed Rāvaṇ. With the heart of the Sun in his consciousness, and using Viṣṇu's bow—

representing Wholeness, infinite dynamism—every aspect of specificity was upheld by one unbounded Wholeness.

Rāvaṇ's ten heads can also represent the ten *Maṇḍals* (divisions) of Ṛk Veda. In this perspective, each *Maṇḍala* was awakened by Rām, and Rām's victory in the final battle results in the awakening of Totality to its own nature.

As the battle between the main protagonists continued, Rām wondered why his arrows were still not able to destroy Rāvaṇ, and he began to recollect his previous encounters. This means that the central nervous system, Rām, is evaluating all of the neural connections that he has established as he placed each area in its proper order, under his control. To accomplish this he must have totality in his awareness, for this is the only way he can finally conquer Rāvaṇ.

Rām reviewed his confrontations in a very specific order, beginning first with his battle with Mārīcha, the *Rākshasa* who had disturbed Vishwāmitra's area, the vestibular system. By reviewing this encounter Rām re-enlivened his connection with the vestibular system, and with the state of proper order and balance that he had established. This reminded him of his passage through the forests where other *Rishis* lived, and his correction of various imbalances in each area.

He specifically remembered his battle with Khara, Dūshaṇa, and Trishiras, Rāvaṇ's half-brothers, who correspond to the vestibulocerebellum. In killing them, Rām was able to restore the vestibulocerebellum and maintain its coordination with higher brain functions.

Once Rām remembered his renewal of that area, he then recalled his battle with Virādha, who corresponds to an anomaly in the autonomic nervous system. The autonomic nervous system is critical to all the internal parts of the body, and it is essential for life that it function properly.

Next he remembered his battle with Kabandha, who corresponds to an

abnormality in the basal ganglia. An imbalance in this system can result in debilitating motor diseases such as Parkinson's or Huntington's disease. Huntington's disease results in overactivity of the limbs, producing a tendency to 'overshoot' a target. Parkinson's disease causes tremor at rest and a similar inability to reach a target properly, with hand movements becoming as if frozen and the person becoming rigid. Rām corrected all these abnormal characteristics when he restored the basal ganglia to proper functioning.

He next recalled piercing the seven sāl trees—corresponding to the seven brainstem areas—with his arrow continuing beyond the sāl trees and descending to the seven subterranean regions, which represent the spinal cord and its connection to the periphery. We may recall that he accomplished this feat in order to prove to Sugrīva that he could subdue Vālī, who along with Sugrīva corresponds to the pituitary gland with all its feedback mechanisms. In this particular memory we see Rām reconnecting himself with all the sensory and motor connections to the brain as well as with the entire hormonal system.

His final recollection was of sending arrows into the ocean surrounding Lankā in order to gain the support of Sāgar to build the bridge to Lankā. This brought to Rām's mind all the bodily fluids, including the cerebrospinal fluid. His memory of the cerebrospinal fluid is especially important since an abnormality in this area, such as an increase in pressure, can cause oedema, completely disabling the brain through loss of consciousness, lethargy, headaches, and disruptions in both the cardiovascular and respiratory systems.

Having reviewed his control of these aspects of the physiology and awakened them in his consciousness, Rām seated himself in Indra's chariot for his confrontation with Rāvaṇ. Rām has now awakened his full power, Totality.

### ***Yuddha Kāṇḍ, Sarga 108: Brahmā's Arrow***

At a precise moment, Rām was given critical information by Mātālī, Indra’s charioteer. Indra is the mind, and his charioteer is a physical expression, a conduit, of this subtle level of consciousness. Mātālī, who had then become Rām’s charioteer, reminded him to use the arrow that he received from Brahmā, who is Totality, Wholeness—the ultimate value that will conquer any specific value.

Rām had reviewed his previous encounters and realized that he had already gained control over all specific values. But even with all this he still had not been able to destroy Rāvaṇ, and the solution came to him from the subtle level, from the charioteer of Indra. When Rām reviewed the field of specific values, an impulse came from the charioteer of the mind, which reminded him that he was in possession of an arrow from Brahmā that would bring specific values in harmony with the value of the Absolute. This was an arrow of the Absolute with which non-localized infinity could be localized through Rām. Rām is the embodiment of Wholeness, and thus he was able to bring the specific back to the holistic—he could impart the value of the holistic upon the specific.

The Rām Charit Mānasa of Tulsīdās tells us that Rāvaṇ was liberated at his death. Rāvaṇ had been waiting for the arrow of Wholeness to bring him back to the Absolute.

### ***Yuddha Kāṇḍ, Sarga 109–114:*** **Rāvaṇ’s Funeral and Vibhīshaṇ’s Coronation**

At Rām’s command, Lakshmaṇ coronated Vibhīshaṇ as the ruler of Lankā. Since Vibhīshaṇ was a devotee of Rām, the cerebellum and all cellular activities were placed under the control of the holistic value of Natural Law.

Rām asked Vibhīshaṇ to perform the funeral rites for his deceased brother, Rāvaṇ, and he also involved Vibhīshaṇ in the activities surrounding Sītā’s return, asking him to request her presence and escort her to Rām. This indicates that the nourishing power of Natural Law, available in Sītā, was



returning to the complete control of the holistic value of Natural Law, which Rām embodies.

Vibhīshaṇ's role as intermediary was necessary because Sītā had remained in Lankā, the cerebellum, since her abduction. Her return to Rām signifies that the nourishment of any aspect of cerebellar functioning would now be totally under the control of the holistic functioning of the physiology. Vibhīshaṇ played the role of facilitator in the surrender of Sītā's nourishing power back to the holistic value of Natural Law—the specific accepts Wholeness, and unites *Prakṛiti* with *Purusha* as Wholeness, *Brahm*.

Hanumān was also involved in the process. He delivered Rām's message to Sītā, and asked her permission to kill the *Rākshasīs* who had been guarding and sometimes threatening her. Sītā, however, asked him not to kill them, because they were not destructive. These *Rākshasīs* correspond to small arteries or veins in the cerebellum, which only performed a negative and disrupting function because they had been under anomalous control. Once the whole universe of the physiology is under Rām's holistic control, even these small arteries must be protected and maintained, for they are necessary for the smooth functioning of the cerebellum. After Vibhīshaṇ became the ruler of Lankā, all the beings residing there were under the guidance of the evolutionary power of Natural Law, and therefore correspond to useful and necessary structures and functions in the cerebellum.

### ***Yuddha Kāṇḍ, Sarga 115–117: Rām and Sītā***

The complete story of Rām and Sītā's first meeting after the battle will be presented from a physiological point of view in Chapter XVIII, which focuses on Sītā's life. In brief, Sītā was required to prove her purity by entering a fire, which demonstrates the value of *Prakṛiti* revealing her true nature as absolute, infinite, and unbounded. At the moment when Sītā entered the fire, all the *Devatās* appeared, and Brahmā revealed to Rām his true, holistic, divine nature. Rām had been functioning in the relative field through the inspiration of Natural Law expressed through the value of Sītā, and now

he came back to his absolute, unbounded *Purusha* value. At this point, Rām realized his true nature as *Brahm*, Totality.

When *Prakṛiti* transcends relativity, any aspect of *Purusha* present in the expressed field of Natural Law realizes that it is Wholeness and absolute, pure Being. This *sarga* describes an awakening of Totality on the level of *Prakṛiti* and on the level of *Purusha*, with the *Purusha* value recognizing *Prakṛiti*, because indeed Sītā was not touched by the fire. Wholeness awakened everywhere, all anomalies were gone, and there were no remaining specific values outside of Wholeness.

Thus the *Yuddha Kāṇḍ* comes to a glorious conclusion, with every aspect of life in perfect harmony with total Natural Law. The *Rākshasas* were either killed or subdued, and everyone else was aligned with Rām. Sītā, the *Prakṛiti* value of Natural Law, came to Rām from its holistic, expressed value of Totality, and then went into the fire, the Transcendent.

When all this took place, what remained was the great realization of life, beautifully expressed in the Bṛihad-Āraṇyak Upanishad:

अहं ब्रह्मास्मि

*Aham Brahmāsmi*  
(*Bṛihad-Āraṇyak Upanishad*, 1.4.10)

*I am Totality.*

This represents the emergence of Rām in his true nature, in which he was truly Vishṇu, truly Totality, the incarnation of *Brahm*.

## राम ब्रह्म परमारथ रूपा

*Rām Brahm Paramāratha Rūpā*

*(Rām Charit Mānasa, Uttar Kāṇḍ, 20.1–4)*

*Rām is Brahm—Totality, embodiment of Transcendental Reality..*

This is the realization that comes to every human being when they reach the state of complete awakening that is Unity Consciousness. In Unity Consciousness, the experience of the anomalies of life are gone, and everything is experienced as part of the evolutionary nature of Natural Law, Totality. Every human being can realize his cosmic nature, every individual can say *I am Totality*. Every individual quality of Natural Law ultimately will realize its true nature, *Purushottam*.

In this sense *Prakṛiti*, which manifests the entirety of relative life, is also realized as Wholeness, untouched by anything—it cannot be burned or destroyed by fire, it cannot be transformed by anything, it is pure, infinite Being. In the immortal words of the Bhagavad-Gītā,

नैनं छिन्दन्ति शस्त्राणि नैनं दहति पाद्मघ्नकः

न चैनं क्लेदयन्त्यापो न शोषयति मारुतः

*Nainam chhindanti shastrāṇi nainam dahati pāvakah*

*na chainam kledayantyāpo na shoshayati mārutaḥ*

*(Bhagavad-Gītā, 2.23)*

*Weapons cannot cleave him, nor fire burn him; water cannot wet him,  
nor wind dry him away.*

This is the culmination of the Rāmāyaṇ and the realization of the ultimate state of development of the human brain and human physiology. It is the awakening of the totality of Natural Law in the experience of Unity Consciousness.

Once Agni, the *Devatā* embodying the principle of fire, emerged to present Sītā to Rām and to attest to her purity, Rām gladly received her. He then reassured her that he had always known her to be pure, and explained that the test was necessary to prove her purity to everyone else. Rām knew *Prakṛiti* to be perfect and never specific, nor involved in any specific value. At this point Dasharath appeared from Heaven and expressed his joy, and then returned. At Rām's request, Indra brought all the dead *Vānara* and *Ṛiksha* in his army back to life.

With the realization of Unity Consciousness, we establish ourselves beyond time and space, beyond mortality. This is the reality in which one goes beyond everything relative—space and time, life and death. The appearance of Dasharath and the revived *Vānara* reveals that they were never truly gone, for death is only one experience, one aspect of the relative field of life. They are always alive, always available, and when the experience of Unity Consciousness prevails and negativity is absent, and when specificity is experienced in terms of Wholeness, the realization that there is no loss, no death, no separation, is natural and spontaneous.

It is a beautiful level of achievement, a glorious realization that transcends and eliminates all fear of separation, all fear of death, all fear of change and difference. Unity is reality. Unity is the truth of the physical as well as the non-physical world. Even time and space simply disappear within the experience of Unity, and the past, present, and future are enjoyed in terms of one holistic reality of Natural Law.

## ***Yuddha Kāṇḍ, Sarga 120–128:*** **The Return to Ayodhyā**

There are descriptions at the end of *Yuddha Kāṇḍ* that illustrate how every aspect of life was returned to a state of order. Rām and Sītā returned to Ayodhyā in the aerial chariot Pushpak, and as they flew over the Earth Rām pointed out landmarks of their fourteen-year exile. Rām invited all the *Vānara*, along with Vibhīṣaṇ and his *Rākshasa* ministers, to enjoy triumphant celebrations in Ayodhyā, after which he re-established the government, with Bharat as prince regent.

The ideal life that is described in Ayodhyā portrays the transcendence of time and space and the return of perfect order. During the reign of Rām, the entire society of Ayodhyā enjoyed an elevated level of consciousness, which reveals the order of Nature and the full evolution of Natural Law—how everyone and everything delighted in their most appropriate and beneficial place. The aerial car Pushpak, the chariot that could take anyone anywhere by mere intention, was returned to Kuber, its original owner. All these events together indicate that the supreme values of Natural Law were guiding the affairs of the entire Rāmāyaṇ.

The following are a few expressions that describe this ideal society under the rule of Rām, in which everyone enjoyed perfect health and lived in accord with Natural Law:

सद्धर्घं मुदितमेद्धद्यासीत्सद्धर्घो धर्मपरोऽभद्धद्यत्  
राममेद्धद्यानुपष्यन्तो नाभ्यहिंसन्परस्परम्

*Sarvaṁ muditam evāsīt sarvo Dharma-paro 'bhavat*  
*Rāmam evānupashyanto nābhyahimsan parasparam*  
*(Yuddha Kāṇḍ, 6.131.100)*

*Happiness was everywhere and everyone was established in Dharma.  
Seeing Rām alone, no one harmed anyone else.*

The citizens enjoyed an ideal life, never harming each other, always acting in accord with Natural Law. ‘Seeing Rām alone’ means experiencing the transcendental field of pure Being that Rām embodies, and this alone was sufficient to deter any harmful behaviour. Even in this age we have seen the same phenomenon—in criminals who learn to meditate no longer committing crimes, and with crime rates declining in the vicinity of groups of Yogic Flyers. This phenomenon is brought out in the following verse:

नाकाले म्रियते कश्चिन्न व्याधि प्राणिनां तथा  
नानर्थो द्विद्यद्यते कश्चिद्रामे राज्यं प्रशासति

*Nākāle mriyate kashchin na vyādhi prāṇinām tathā  
nānartho vidyate kashchid Rāme rājyaṁ prashāsati  
(Uttar Kāṇḍ, 7.99.14)*

*During the reign of Rām no one died prematurely, no one was ill, and  
there were no natural disasters.*

Natural disasters act as a corrective measure for society. When the citizens of a nation begin to violate Natural Law, Nature acts to correct the negative influence that they have created. But when coherence is the predominant characteristic of society—when everyone lives and acts in accord with all the Laws of Nature—there is no need for such corrective measures.

In the following verse we see how every aspect of Nature was put into proper order, how the rains came on time, the trees were always blossoming, and the fruits plentiful:

नित्यपुष्पा नित्यफलास्तरद्वद्यः स्कन्धद्विद्यस्तृताः



काले द्विघर्षी च पर्जन्यः सुखस्पर्शश्च मारुतः

*Nitya-pushpā nitya-phalās taravaḥ skandha-vistritāḥ  
kāle varshī cha parjanyaḥ sukha-sparshash cha mārutaḥ  
(Yuddha Kāṇḍ, 6.131.103)*

*In Ayodhyā the trees with outstretched branches were always in bloom,  
always heavy with fruits. The rains were timely and the winds pleasant  
to the touch.*

During the rule of Rām—Rām Rāj—society functioned harmoniously and in perfect order. The members of each level of society fulfilled their duties and responsibilities, and were happy and fulfilled doing so.

ब्राह्मणाः क्षत्रिया द्विघैश्याः शूद्रा लोभद्विघद्विघर्जिताः  
स्वद्विघकर्मसु प्रद्विघर्तन्ते तुष्टाः स्वद्विघैरेद्विघ कर्मभिः

*Brāhmaṇāḥ kshatriyā vaiśhyāḥ shūdrā lobha-vivarjitāḥ  
swakarmasu pravartante tushtāḥ swair eva karmabhiḥ  
(Yuddha Kāṇḍ, 6.131.104)*

*Brāhmaṇas, kshatriyas, vaiśhyas, and shūdras were free of greed,  
performed their own duties, and were fulfilled in their lives.*

There is also a beautiful verse from Tulsidās' Rām Charit Mānasa, which Maharishi often cited as an expression of the fullness of Rām's rule:

राम राज दुख काहु न व्यापा

*Rām Rāj dukh kāhu na vyāpā*

*(Rām Charit Mānasa, Uttar Kāṇḍ, 21.1)*

*In the reign of Rām suffering belonged to no one.*

Maharishi so often emphasized this verse to remind us that the rule of Rām does not just refer to an historical event in ancient India, but to the perfection of individual and collective life in any time, in any place, when Natural Law becomes the guiding principle of life. The reign of Rām thus not only refers to Rām's return to Ayodhyā, but to any administration in which no one suffers.

This is truly the Rāmāyaṇ revealing a picture of the total value of Natural Law. All aspects of life on Earth, including the dynamic and the silent, the specific and the general, can be easily and spontaneously integrated. Pain and suffering can be forgotten. Oneness is the true reality of the grand symphony of life, the experience of Natural Law. It is nothing but pure Being that expresses itself in terms of the sounds in Veda and Vedic Literature, and in terms of specific vibrations in the universe. Having a human physiology allows us to experience all these different realities and to live the Rāmāyaṇ within us.

The Holy Tradition of Vedic Masters has maintained the truth of reality, the connectedness between silence and dynamism, between the unmanifest and the manifest, and has given us the knowledge to bring life to fulfilment. This account of the Rāmāyaṇ and the details of Natural Law as they unfold in human physiology would never have been correctly understood without Maharishi's guidance. Maharishi enlightened all values of Natural Law and their expressions, their progressions, their transformations, so that it is possible to see them manifesting in the physical world and in human

physiology.

Maharishi has given us the technology and the understanding of how to defeat all *Rākshasas*, how to overcome all aspects of Rāvaṇ, and how to regain Sītā and bring her back—how to bring *Prakṛiti* back to *Purusha*. He has shown us that they are one and the same reality. Future generations of the world will be infinitely grateful to Maharishi for bringing Rām to each of us, and for bringing life to perfection.

### ***Footnotes***

1. See Chapter XIII, [The Origins of Vālī and Sugrīva](#), .
2. See Chapter I, [The Unified Field is the Constitution of the Universe](#).
3. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 116 ff.
4. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 120.
5. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 131–147.



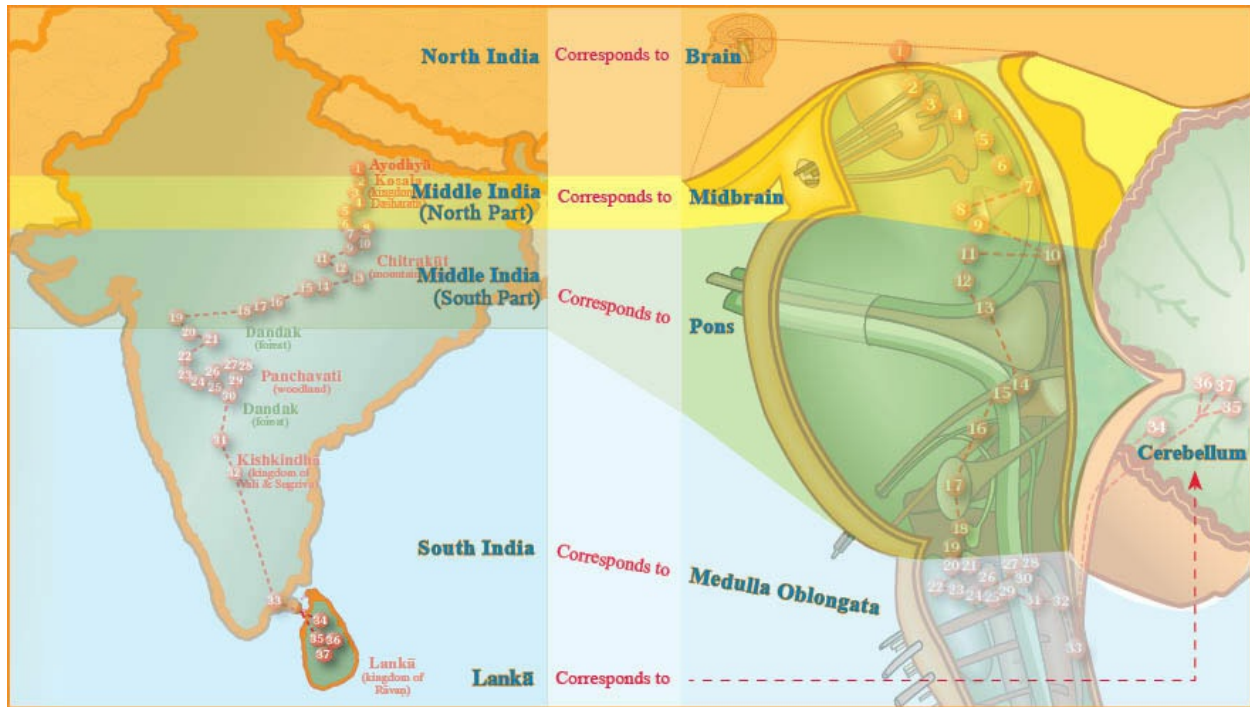
## **Section III: Rām, Sītā, and Hanumān**

## Chapter XVII

# The Path of Rām in India and in Human Physiology

**T**hroughout the preceding chapters we have followed Rām's path as he left his royal palace, first for training and then to wander through the forest in exile, crossing the sea to Lankā to defeat Rāvaṇ, and at last returning to Ayodhyā to rule his kingdom. The overall path of Rām can be located even in modern India. Maharishi pointed out that the geography of India must have changed somewhat due to the passage of so many years, and that it is not significant if a village appears to be in a slightly different location, or if a river has changed its course.

In this chapter we will again focus on Rām's path, this time examining it from the perspective of the specific neural connections made in the brain during his journey, beginning with his exile in the forest and ending with his victory over Rāvaṇ in Lankā. In the context of human physiology, we will find great precision in the events occurring along Rām's path. It is only in the last hundred years that scientists have described all the different parts of the brain, yet this highly precise knowledge has been contained for millennia within the detailed descriptions of the stories in the Rāmāyaṇ (see [figures 17.1–3](#)).



**Figure 17.1 The main regions of India and the locations through which Rām passed during his exile, and their correspondence to the principal structures of the human brain**

Within the centre of the brainstem (the midbrain area where Kosala is located) is an area called the pons. When Rām left Kosala for the first time as a young man in order to undergo training with Vishwāmitra, he travelled north, which corresponds to the direction of the vestibular nuclei. The vestibular nuclei are responsible for balance, eye motion, and all body movement, and accordingly we find that Vishwāmitra trained Rām in the practical art of archery and other skills involving balance and coordination. This included the skill of properly and steadily fixing an object with the eyes in coordination with the movement of the hands and the position of the body (for accurate aiming in archery). Vishwāmitra also taught Rām a number of *Mantra*,<sup>1</sup> which correlates with this path upwards to the superior area of the brain. We note too that Vishwāmitra is described in the Vedic Literature as having attempted to create his own universe in the heavens through the power of his mind. This also points to the higher areas of the brain.

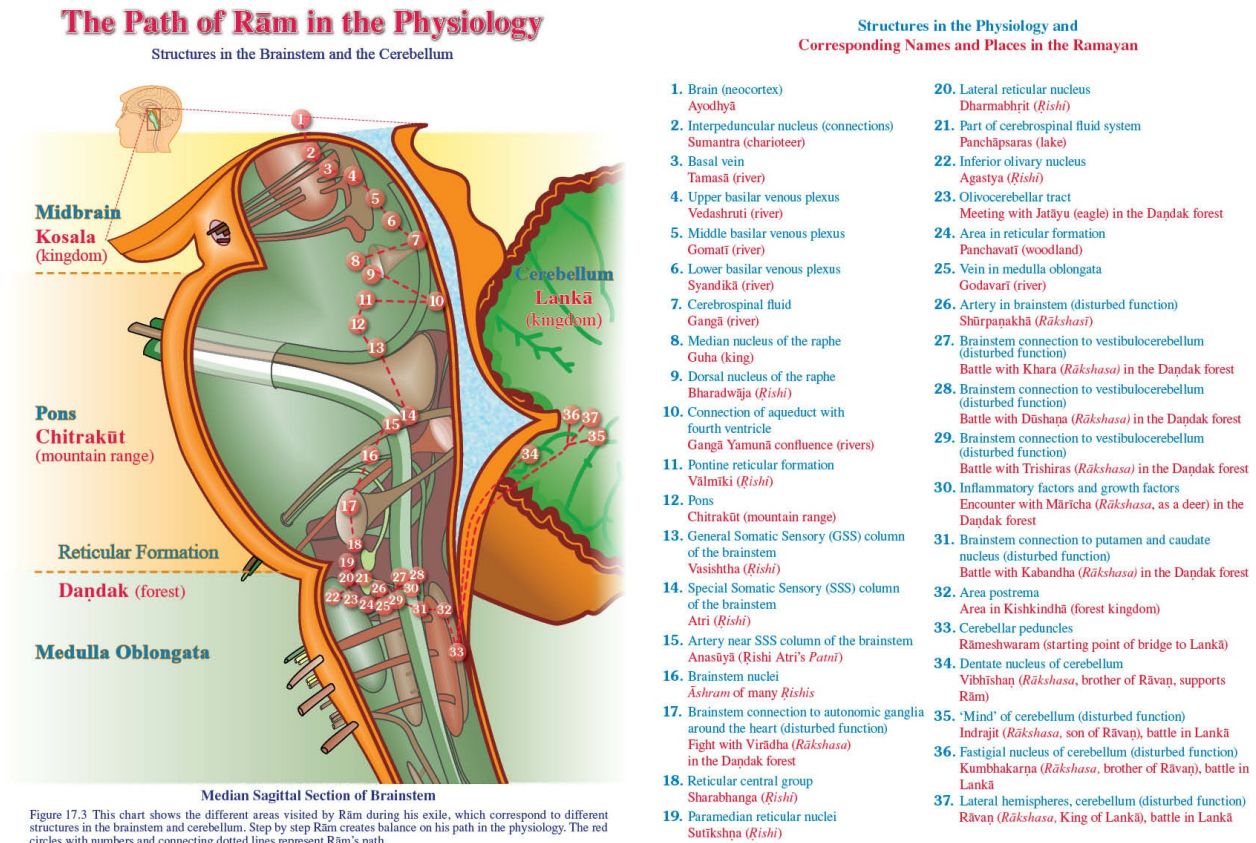


**Figure 17.2** The next chart shows the different areas in ancient India visited by Rām during his exile. Step by step Rām created balance on his path—not as a single historical event, but as an ongoing process in our physiology. The red circles with numbers and connecting dotted lines represent Rām’s path. (Double tap on the image to enter zoom mode.)



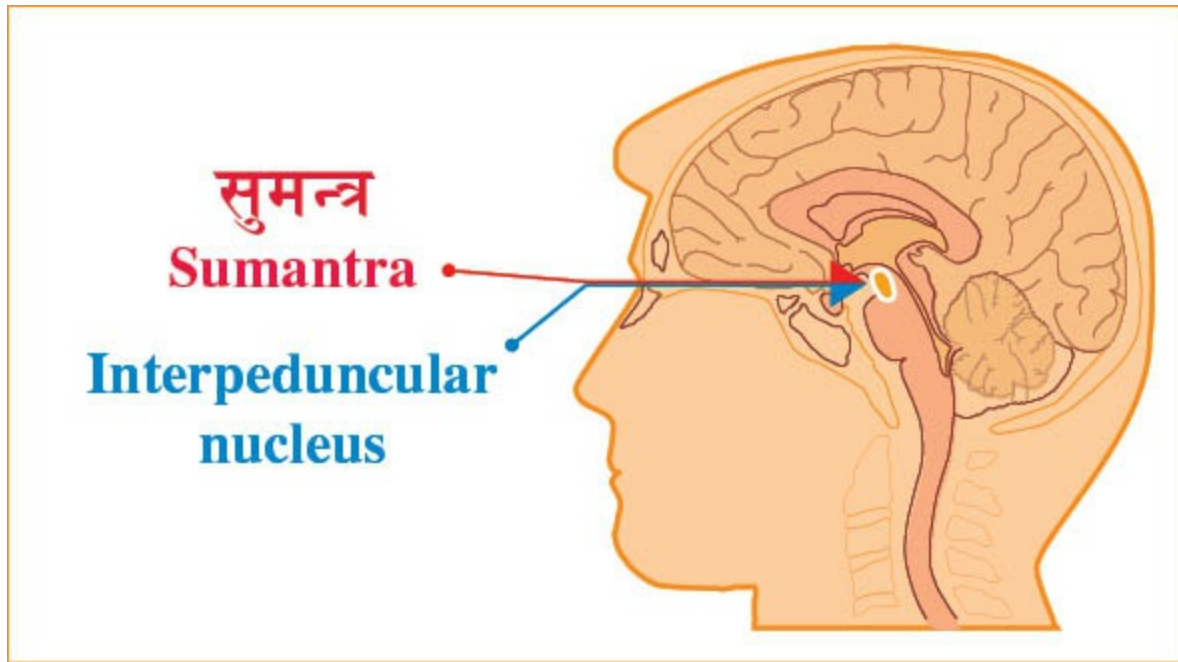
Figure 17.2 This chart shows the different areas in ancient India visited by Rām during his exile. Step by step Rām created balance on his path—not as a single historical event, but as an ongoing process in our physiology. The red circles with numbers and connecting dotted lines represent Rām’s path.

**Figure 17.3** The next chart shows the different areas visited by Rām during his exile, which correspond to different structures in the brainstem and cerebellum. Step by step Rām creates balance on his path in the physiology. The red circles with numbers and connecting dotted lines represent Rām’s path.



Rām’s second departure from Kosala was with Dasharath’s charioteer, Sumantra, who drove Rām, Sītā, and Lakshmaṇ out of **Ayodhyā (Location 1)**<sup>2</sup> and into the forest for their exile. Following Rām’s instructions, Sumantra drove in such a way that the citizens of Ayodhyā could not follow, because Rām wanted them to continue their normal lives at home. **Sumantra (Location 2)** corresponds to the interpeduncular nucleus in the midbrain, which corresponds to the area of Kosala. The interpeduncular nucleus has connections with other brain structures, and its function is to help transfer information from one location to another. For example, there is a pathway to

the interpeduncular nucleus called the fasciculus retroflexus, that arises in one brain structure (the habenula), and then turns and connects back to the interpeduncular nucleus. These neural pathways correspond to Rām's request to Sumantra to move around in different places, back and forth and making circles, so that his people could not follow.



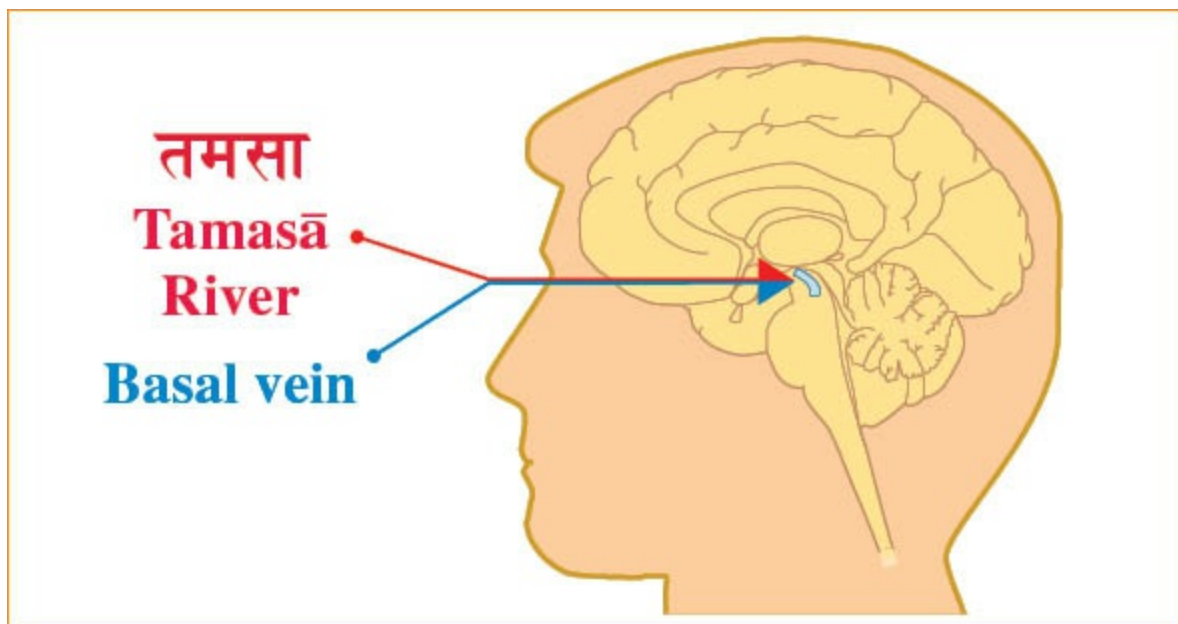
**Figure 17.4 Sumantra, King Dasharath's charioteer, corresponds to the interpeduncular nucleus in the midbrain.**

The citizens and families of Kosala correspond to the small nuclei in the midbrain area. These small nuclei create different short connections with other structures, which sometimes go either back and forth or trace different circuitous shapes. Rām asked his followers to return to their homes because he did not want to disrupt their normal activities and functions. We are told that the citizens of Ayodhyā started to return home but then fell asleep, awakening only to find that Rām had continued without them. Some of the mechanisms controlling sleep and waking are in this area of the nervous system. They searched in all directions but were unable to find him and began to weep, eventually returning home. Dasharath also wept and grieved over Rām's exile. We note that the oculomotor nucleus is located in this area

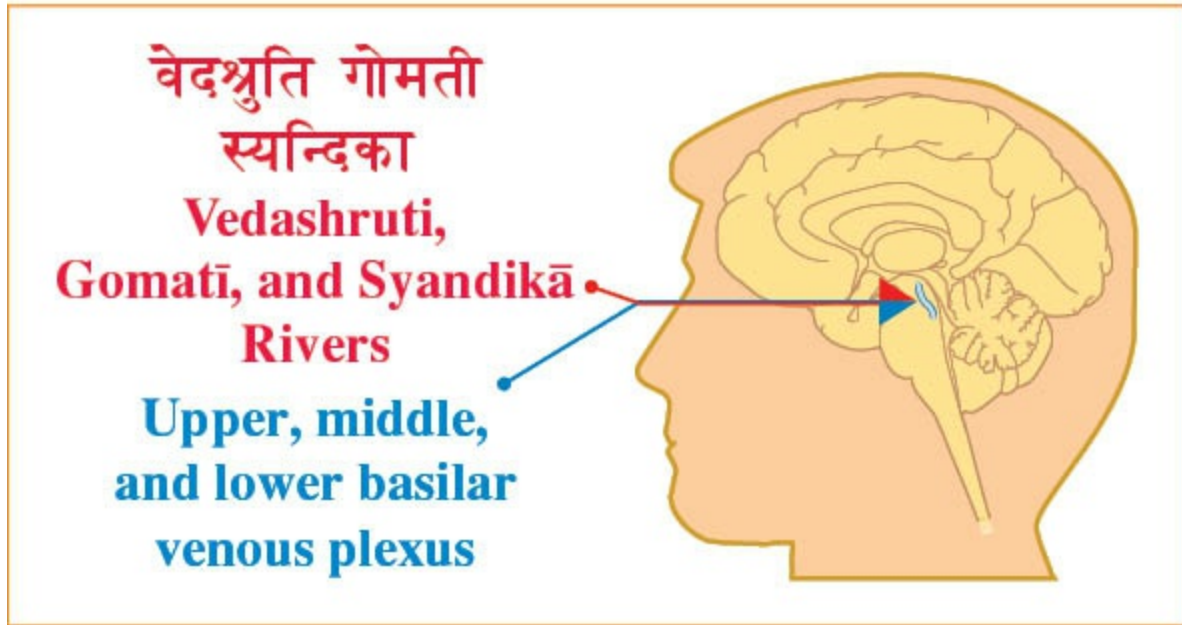


of the brainstem and controls the eye muscles (moving the eyes in all directions). The nuclei that control tears are also located in the pons more caudally.

Rām departed from Kosala, continuing to the **Tamasā river**, which is indicated as **Location 3** in our drawing of the brainstem. The Tamasā river corresponds to the basal vein at the base of the brain. Rām and his party then moved to the **Vedashruti river (Location 4)**, which corresponds to the upper basilar venous plexus. They then continued to the **Gomatī river (Location 5)**, which corresponds to the middle basilar venous plexus, and then to the **Syandikā river (Location 6)**, which corresponds to the lower basilar venous plexus. Finally they reached the Gangā (**Location 7**). The clear, heavenly flow of the Gangā corresponds to the flow of cerebrospinal fluid. It is a heavenly fluid because it comes from the superior part of the brain, which corresponds to the heavens. We have previously discussed the origin of the cerebrospinal fluid in the choroid plexus of the ventricles, and in Chapter IX we correlated it with the emergence of the Gangā from Shiva.

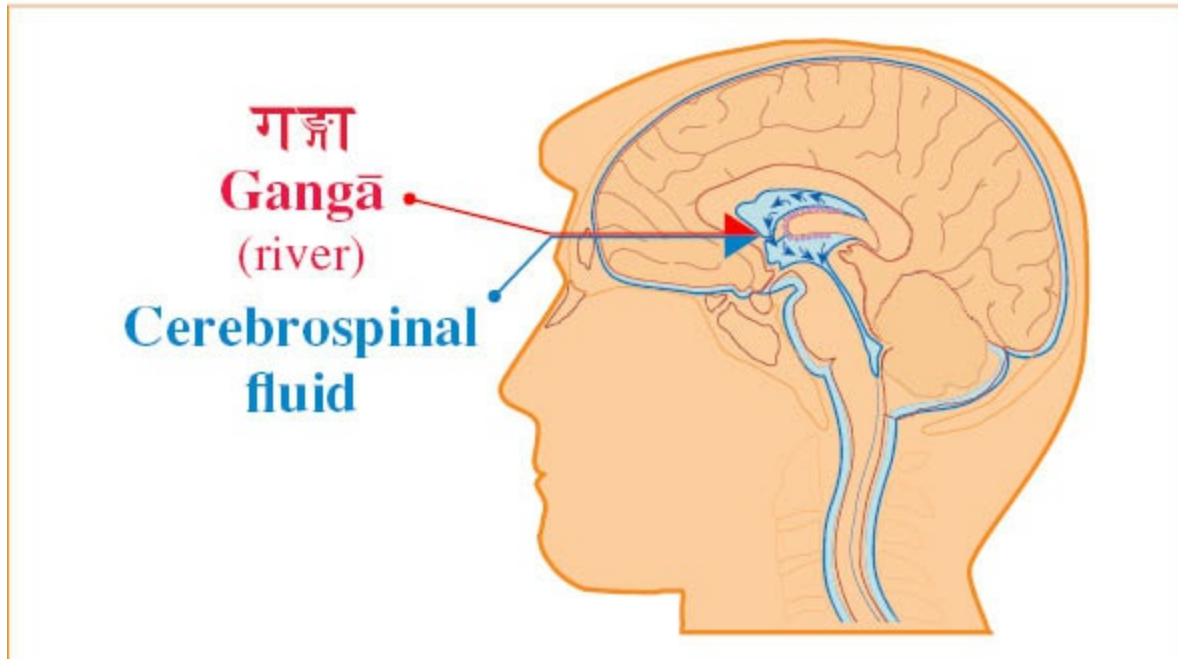


**Figure 17.5 The Tamasā river corresponds to the basal vein at the base of the brain.**

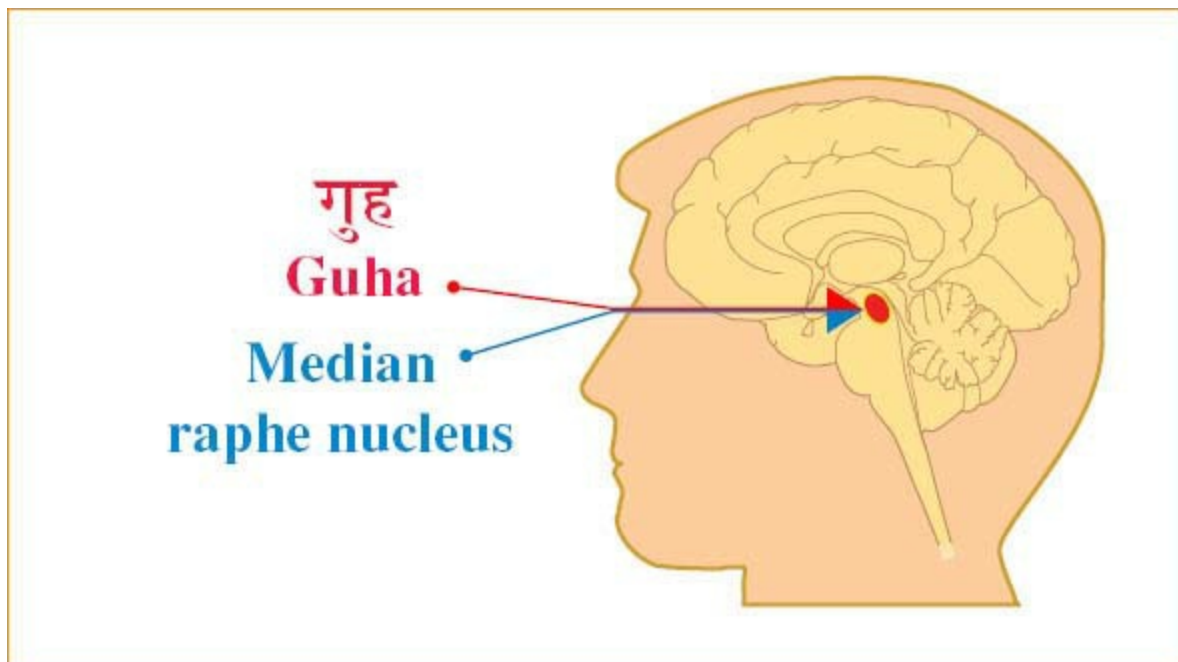


**Figure 17.6 The Vedashruti, Gomatī, and Syandikā rivers correspond to the upper, middle, and lower basilar venous plexus.**

At the Gangā, Rām met Guha, the king of Nishādas. Guha invited Rām to spend the night and told him that he would watch over everyone so that they could sleep safely. Lakshmaṇ refused, however, insisting that he would watch over Rām and Sītā. **Guha (Location 8)** represents the median raphe nucleus, which helps regulate the cycles of sleep and waking, and is present in the area between the midbrain and pons. The median raphe nucleus is also part of a larger network of nuclei called the mesolimbic system, which controls waking and dreaming states of consciousness.



**Figure 17.7 The river Gangā corresponds to the cerebrospinal fluid.**



**Figure 17.8 King Guha corresponds to the median raphe nucleus.**

As long as we are not yet fully enlightened, the median raphe nucleus is the structure that will take over brain activity when we sleep. In sleep state, even



though we are not conscious, our body continues to perform such functions as digestion, circulation, and breathing. When Rām arrived, the king offered his services to watch over Rām while he was sleeping, but Rām is Wholeness and his experience of sleep was therefore entirely different.

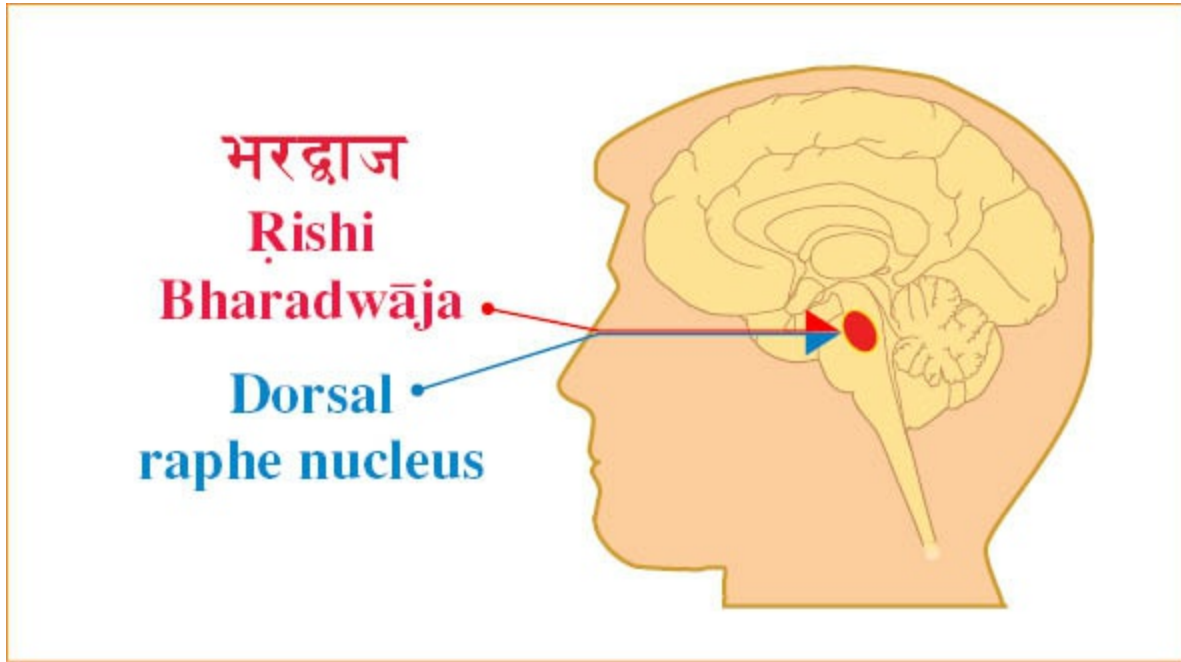
Maharishi explains that in higher states of consciousness we have a different experience of sleep. When we reach Cosmic Consciousness we never lose the experience of pure consciousness, even in the midst of deep sleep. Maharishi describes this state as ‘witnessing’, because unbounded, bliss consciousness is always present even while the mind and body are asleep, and therefore one has the sense of ‘witnessing sleep’. Even those newly practising Maharishi’s programmes often have this experience.

When Lakshman refused to permit Guha to watch over Rām while he was sleeping and chose instead to watch over Rām himself, he was illustrating the witnessing state of sleep. Lakshman is Rām, and Rām is Wholeness, Totality. Even though they are represented as individuals, Rām and Lakshman are both incarnations of Vishṇu, so Wholeness was watching over Wholeness—the enlightened brain was witnessing itself asleep.

Rām’s party next met with **Ṛishi Bharadwāja (Location 9)**, the son of Atri and one of the *Sapta Ṛishis* (the seven principal *Ṛishis*). Ṛishi Bharadwāja was a man of great knowledge, who went deeply into the study of the Veda. When he began his study he was told that the sum of everything he had learned to that point was as a grain of sand compared to the ocean of knowledge. Undaunted, he continued his study of Veda. Bharadwāja cognized the sixth *Maṇḍala* of Ṛk Veda, which relates to the quality of *Ākāsha*, or space.

In the physiology, Ṛishi Bharadwāja corresponds to the dorsal nucleus of the raphe, which is part of the mesostriatal system. This system has a controlling influence over balance and movement, and is connected to various basal ganglia in the centre of the brain. These basal ganglia correspond to different planets, or *Grahas*, in Jyotish. Bharadwāja represents the value of Wholeness

that integrates the knowledge of the Veda in terms of the entire physiology. Rām's meeting with Bharadwāja at this point is significant because it means that the central nervous system is effectively connecting each of the areas Rām has passed through, indicating an increasingly complete and holistic style of brain functioning.

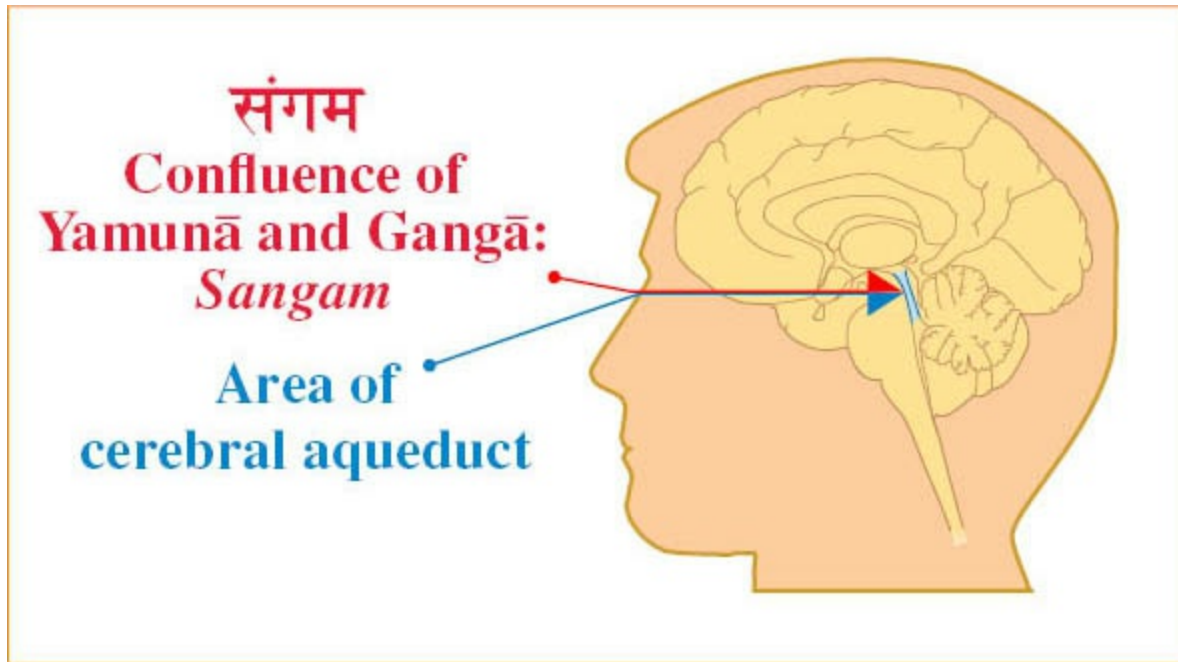


**Figure 17.9 Rishi Bharadwāja corresponds to the dorsal nucleus of the raphe.**

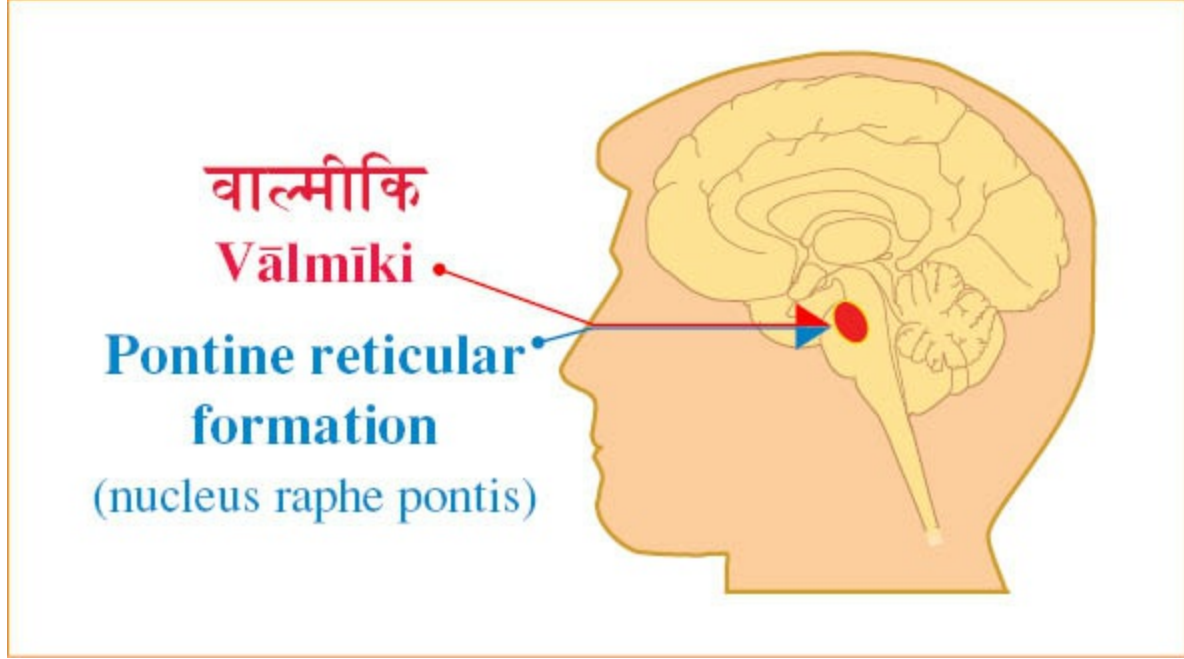
Rām and his party continued their travels, arriving next at the confluence of the **Yamunā and Gangā rivers (Location 10)**. This is the area of the cerebral aqueduct that allows the flow of cerebrospinal fluid between the third ventricle in the diencephalon and the fourth ventricle between the pons and cerebellum. From there they moved towards Chitrakūt mountain, which corresponds to the pons in the brainstem. If you look at this part of the brainstem you will see the pons as a bulging structure resembling a mountain.

At Chitrakūt, Rām met with **Rishi Vālmīki (Location 11)**. In our analysis of *Bāl Kāṇḍ*, we discussed the events leading to Vālmīki's cognition of the Rāmāyaṇ.<sup>3</sup> In the Puraṇ we learn that Valmīki was one of 10 sons of Varuṇa.

While still a young man, he fell in with a group of thieves. One day he was attempting to rob some *Ṛishis*, who asked him why he was stealing. When he replied that it was to feed his children and family, they asked him if his family was willing to partake of the sin from his theft. He went home and asked his family members, who replied that they would willingly partake of whatever he stole but they did not want to share in his sin. On hearing this response, Vālmīki returned to the *Ṛishis* to repent and learn from them.



**Figure 17.10** The confluence between the Yamunā and Gangā rivers, Sangam, corresponds to the area of the cerebral aqueduct.



**Figure 17.11 Ṛishi Vālmīki corresponds to the pontine reticular formation, the nucleus raphe pontis.**

For many years he remained in one place performing great *Tapas* and going deep into *Samādhi* (pure consciousness). As he continued to sit in one spot, a colony of ants built a large ant hill all around him, but he remained unaware due to his absorption in *Samādhi*.

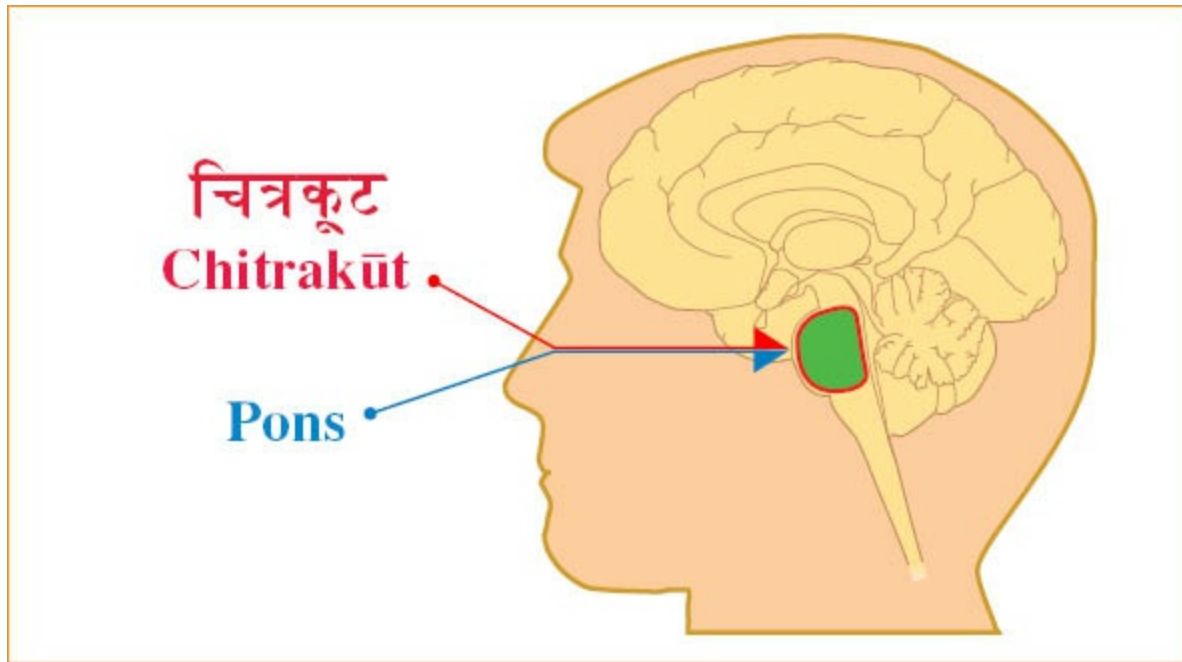
When the *Ṛishis* came to see him, they broke the ant hill and helped him step out. The Sanskrit word *Valmīka* means ‘ant hill’, and this was how he gained the name Vālmīki. **Ṛishi Vālmīki (Location 11)** corresponds to the pontine reticular formation, in particular the nucleus raphe pontis, a very powerful structure that sits near the midline of the pons, Chitrakūt. The nucleus raphe pontis connects to sensory nerves and to various nuclei of the brainstem area. There are actually many *Ṛishis* in this area, whose significance we will discuss.

The nucleus raphe pontis has the ability to ‘steal’, subdue, or weaken the neuronal activity of nearby structures. For example, if some nearby nuclei, or *Ṛishis*, should become imbalanced or unhealthy, the nucleus raphe pontis will

provide a balancing and supporting effect. This nucleus also builds up very powerful connections with structures in the pons and with higher parts of the brain, as well as to the spinal cord. When Vālmīki met Rām he became connected to Wholeness, and his behaviour was therefore supportive to all values of Natural Law.

Vālmīki was never overshadowed by anything, he was always established within himself. Even when the ants built their towering hill around him it was of no significance. In this he exemplified the beautiful self-referral activity of the *Ṛishis*. Maharishi has given us this same understanding and experience, showing us that all the little things in life are simply like the construction of the ant hill. If we are fully established in the Self, we can never be overshadowed or disturbed by them. Once we recover our true nature we change from acting in a limited fashion with a limited understanding to acting with the fullest possible understanding and knowledge—like Vālmīki, the great *Ṛishi*, who cognized the story of the Rāmāyaṇ.

While Rām, Sītā, and Lakshmaṇ stayed at **Chitrakūt (Location 12)**, many people came to visit, including King Dasharath, Bharat, the other members of Rām's family, as well as various *Ṛishis*. Rām asked his family to return to Ayodhyā, explaining that he needed to fulfil his duty, and promised that when the period of his exile passed he would return to rule Ayodhyā. In the area of the pons, fibres make connections from the frontal and parietal lobes, and from all parts of the brain and central nervous system. The central nervous system must take control of the entire physiology so that no part is left outside the value of *Brahm*, Totality.



**Figure 17.12 Chitrakūt (a mountain range) corresponds to the pons.**

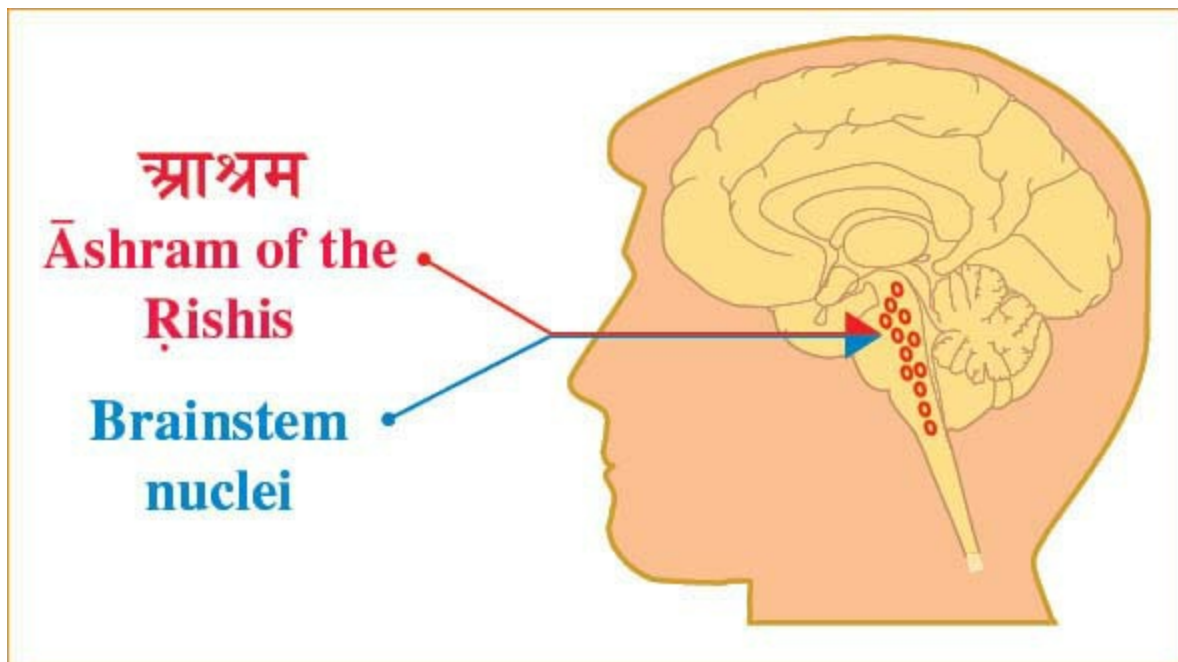
During this period, Rām met with a number of *Ṛishis*. **Location 13** represents the place of Rām’s meeting with **Ṛishi Vasishtha**, who corresponds to the general somatic sensory column of the brainstem. As he moved deeper into the Daṇḍak forest, Rām met **Ṛishi Atri (Location 14)**, who corresponds to the vestibulocochlear nuclei (special somatic sensory column of the brainstem). **Anasūya**, Ṛishi Atri’s *Patnī* (**Location 15**), gave instructions to Sītā at this time.

The Rāmāyaṇ mentions that he met many *Ṛishis* and sages in this area (**Location 16**), and we may assume that these include also the principal *Ṛishis*, the *Sapta Ṛishis* (see [The Ṛishis in the Brainstem](#)).

Rām next encountered **Virādha (Location 17)**, a *Rākshasa* who had formerly been a *Gandharva*.<sup>4</sup> Virādha corresponds to the disturbed activity of the autonomic ganglia around the heart that control the rhythms of the heart and the functioning of the autonomic nervous system. The place where Rām’s battle with Virādha took place corresponds to an area of the brainstem that controls the functioning of the heart. The battle provides an example of how

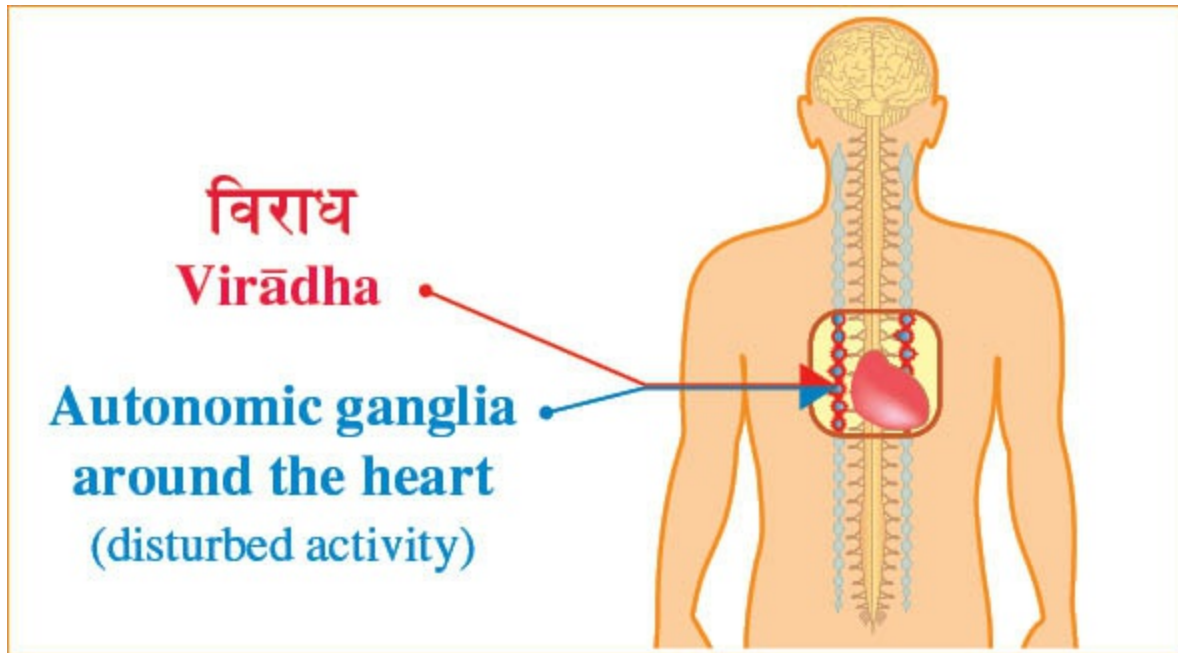


Rām corrects imbalances in an area in order to bring it into harmony with the holistic functioning of the physiology.



**Figure 17.13** The many Āshram of the *Rishis* correspond to the brainstem nuclei.

Rām continued south deeper into the Daṇḍak forest, which corresponds to the reticular formation of the medulla oblongata. This area of our brainstem is highly reticulated, containing all kinds of interconnected structures that give the appearance of a forest. Here Rām met **Rishi Sharabhanga (Location 18)**, who was with Indra at the time. Sharabhanga spoke with Rām, and having reached a state of complete fulfilment he entered a fire and ascended to *Brahma-loka*. Rishi Sharabhanga corresponds to the central reticular group of the medulla, which consists of the ventricular reticular and the gigantocellular nucleus of the medulla.



**Figure 17.14 The *Rākshasa* Virādha corresponds to the disturbed activity of the autonomic ganglia around the heart.**

The central reticular group has important control over digestion, which accounts for the reference to fire. When Rām arrived in this area Sharabhanga surrendered to Rām and entered into Wholeness. His action corresponds to this area of the physiology, with the descending tracts of the extrapyramidal corticospinal or corticobulbar tracts surrendering its functions to the upper part of the nervous system, so that it can function as a relay for the activities of the central nervous system.

At Sharabhanga's suggestion Rām next travelled to meet **Sutīkshṇa**, who represents the paramedian reticular nuclei (**Location 19**). Sutīkshṇa is Agastya's half brother, and indeed they both have a similar connection to the cerebellum. It is Sutīkshṇa who led Rām to meet Ṛishi Agastya, accompanied by another Ṛishi named Dharmabhṛit. **Dharmabhṛit** represents the lateral reticular group, also called the lateral and parvicellular reticular formation (**Location 20**).

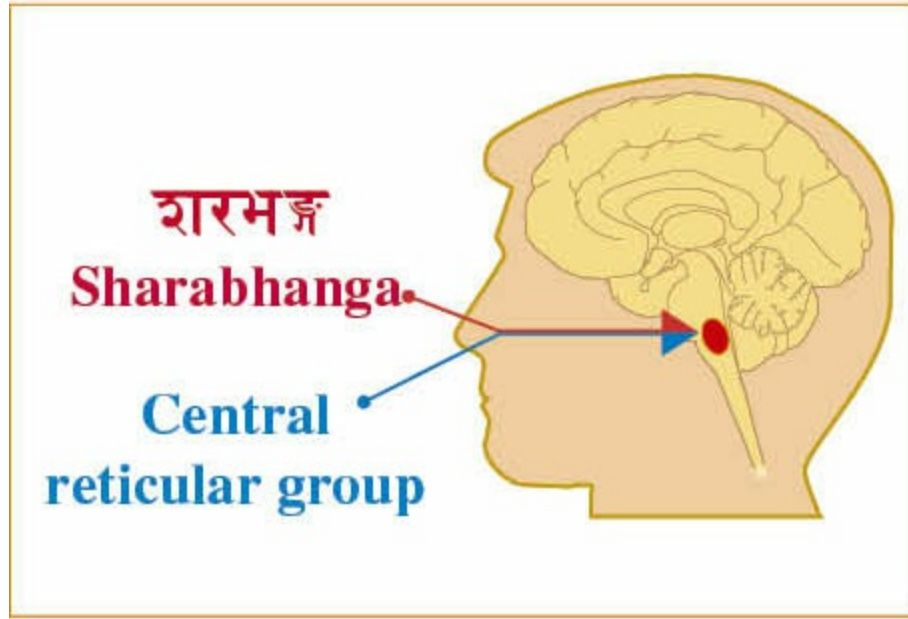


Figure 17.15 Ṛishi Sharabhanga represents the central reticular group of the medulla oblongata.

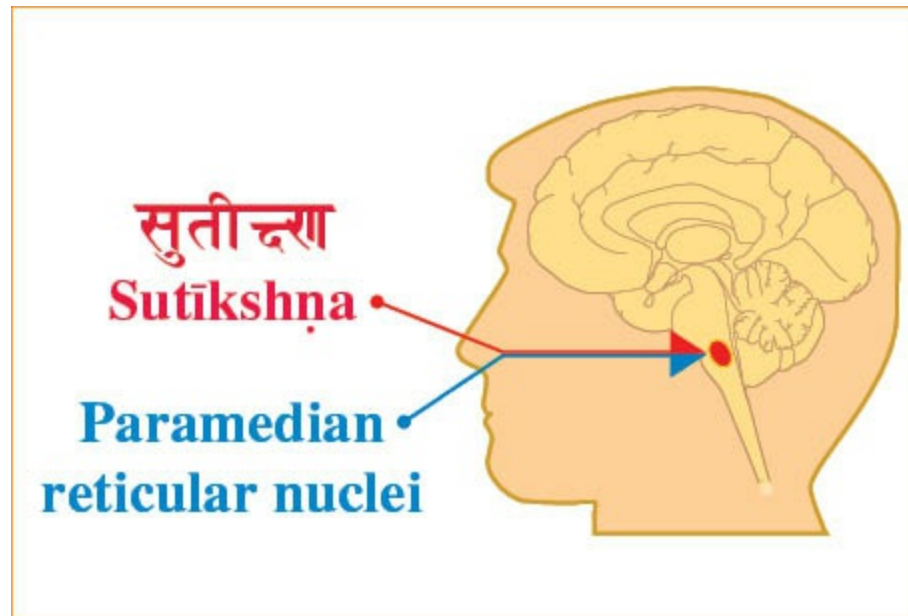
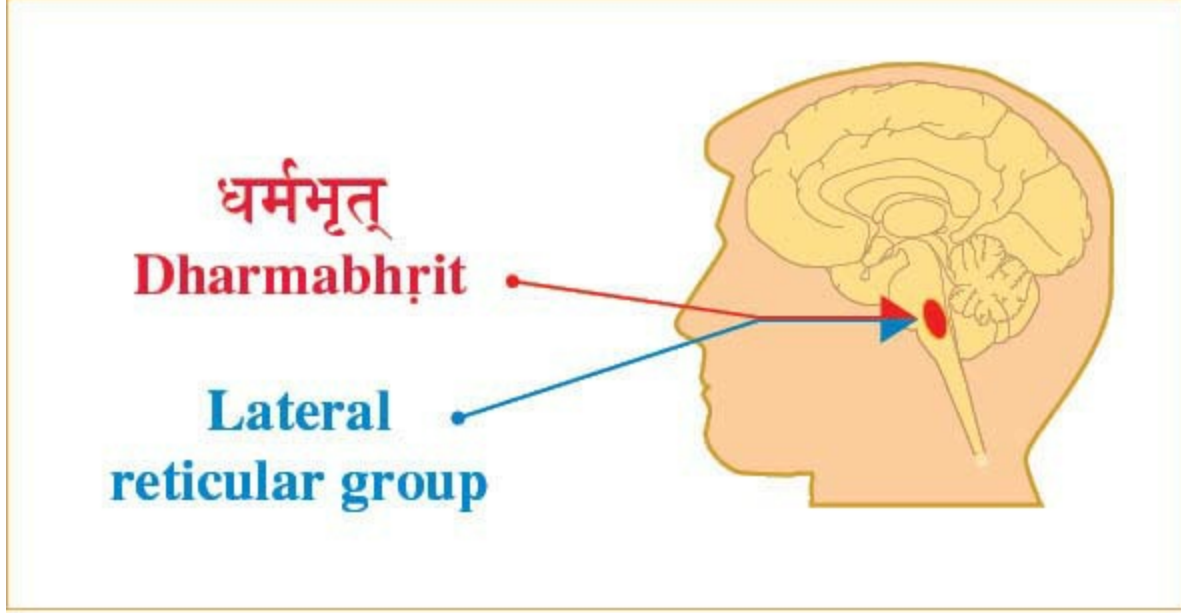


Figure 17.16 Ṛishi Sutikshṇa corresponds to the paramedian reticular nuclei.

Dharmabhṛit told the story of a lake of pure water called **Panchāpsaras**, which corresponds to part of the cerebrospinal fluid system (**Location 21**).

Rām then travelled to meet **Ṛishi Agastya**, who lived on a hill shaped like an olive. This hill corresponds to the inferior olivary nucleus or complex (**Location 22**), which watches over the entire activity of the cerebellum.

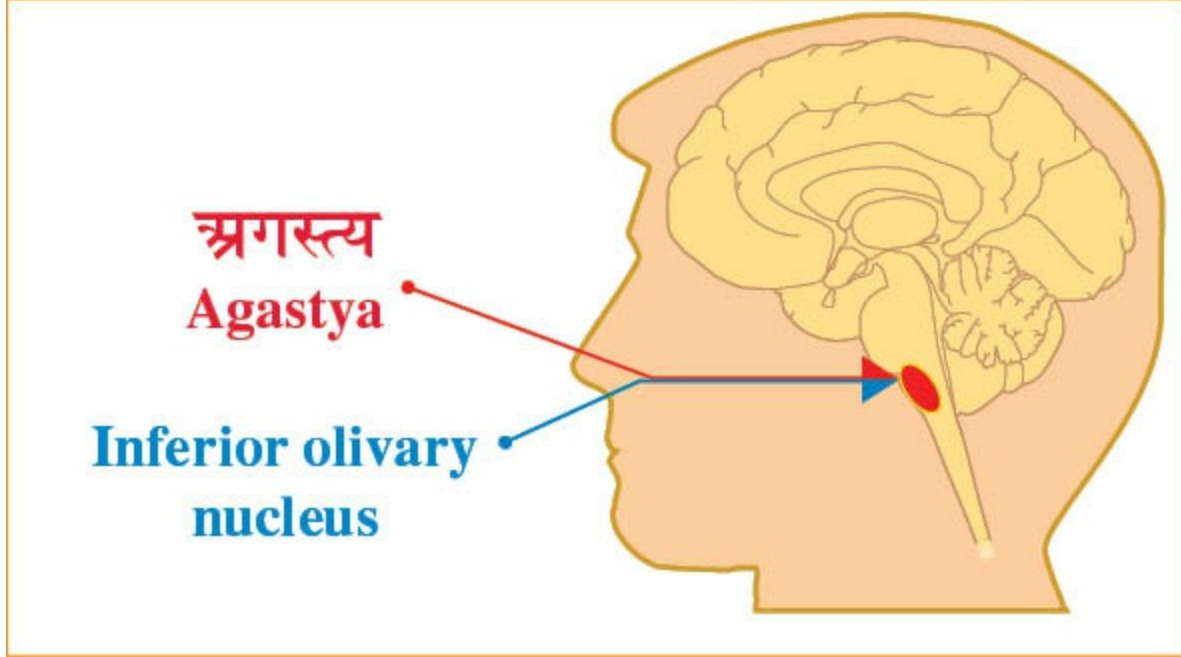


**Figure 17.17 Ṛishi Dharmabhṛit corresponds to the lateral reticular group.**

It was Ṛishi Agastya who guided Rām to conquer Rāvaṇ and recover Sītā, and to re-establish Vibhīshaṇ as the ruler of Lankā. We may also remember that at a crucial time in the battle he advised Rām to employ the *Āditya-hṛidayam* to propitiate the Sun in his heart, a critical event that led to final victory.

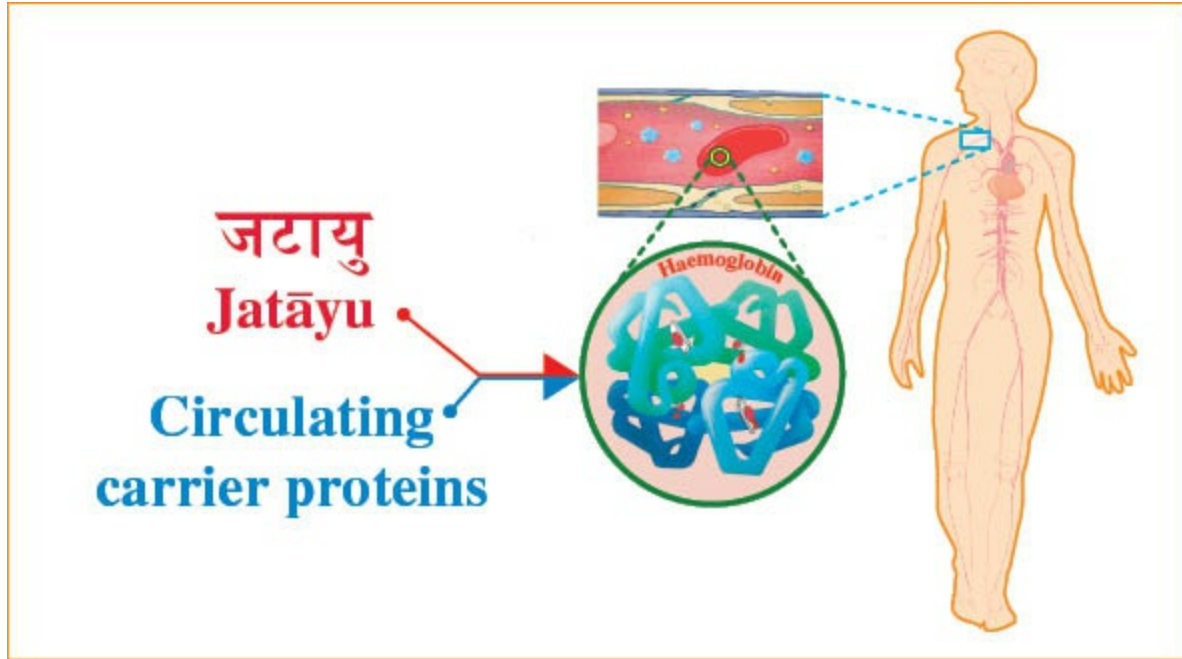
After seeing Ṛishi Agastya, Rām met Jatāyu on his way to Panchavatī. Later, Rām met Jatāyu again as the great eagle lay dying after unsuccessfully trying to save Sītā from Rāvaṇ. Jatāyu had tried to free Sītā by blocking Rāvaṇ, who was returning to Lankā (the cerebellum), but was mortally wounded by the *Rākshasa* king. With his final breaths, Jatāyu related to Rām the perpetrator of Sītā's abduction. Both areas in which Rām met **Jatāyu** correspond to the olivocerebellar tract (**Location 23**), a group of nerve fibres that form a pathway connecting the inferior olivary nucleus to the cerebellum. In Chapter

XII we discussed how Jatāyu corresponds to the protein transport systems, and in particular to the haemoglobin molecule that carries the life-sustaining oxygen corresponding to Sītā.



**Figure 17.18 Ṛishi Agastya corresponds to the inferior olivary nucleus.**

After meeting Jatāyu, Rām continued to a woodland place called **Panchavati (Location 24)**, arriving also at the **Godavarī river (Location 25)**. As Rām and Lakshmaṇ moved closer to Lankā, naturally more *Rākshasas* appeared. In this area they met Rāvaṇ's sister, **Shūrpaṇakhā (Location 26)**, who corresponds to the disturbed functioning of the labyrinthine artery, located in the brainstem near the cerebellum. In Chapter XII we discussed how their encounter with Shūrpaṇakhā led to a battle with **Khara, Dūshaṇa, and Trishiras**, the brothers of Rāvaṇ, who represent the vestibulocerebellum in a state of imbalanced non-holistic functioning (**Locations 27, 28, 29**).



**Figure 17.19** The eagle Jatāyu corresponds to the circulating carrier proteins.

Although Khara, Dūshaṇa, and Trishiras are located within the cerebellum, they create connections to areas in the brainstem. Thus their battle with Rām took place in the Daṇḍak forest—the reticular formation of the medulla oblongata. After Shūrpaṇakhā told Rāvaṇ of their defeat, Rāvaṇ became angry and decided to deal with Rām and Lakshmaṇ himself.



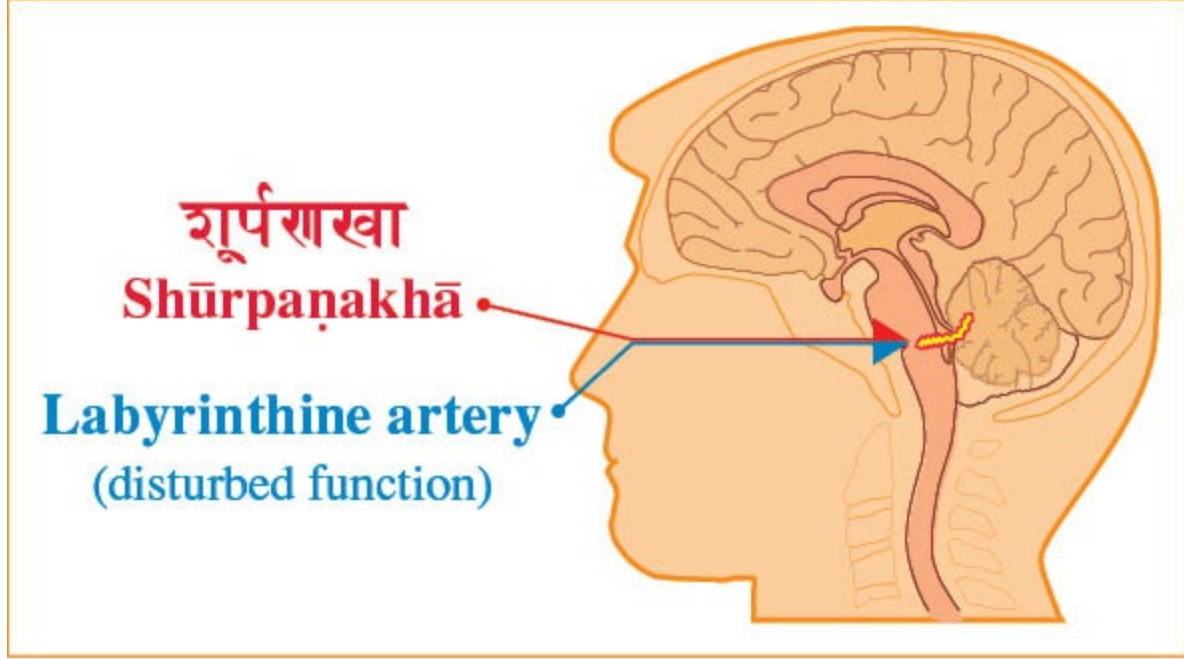


Figure 17.20 The *Rākshaṣā* Shūrpaṇakhā corresponds to the disturbed functioning of the labyrinthine artery.

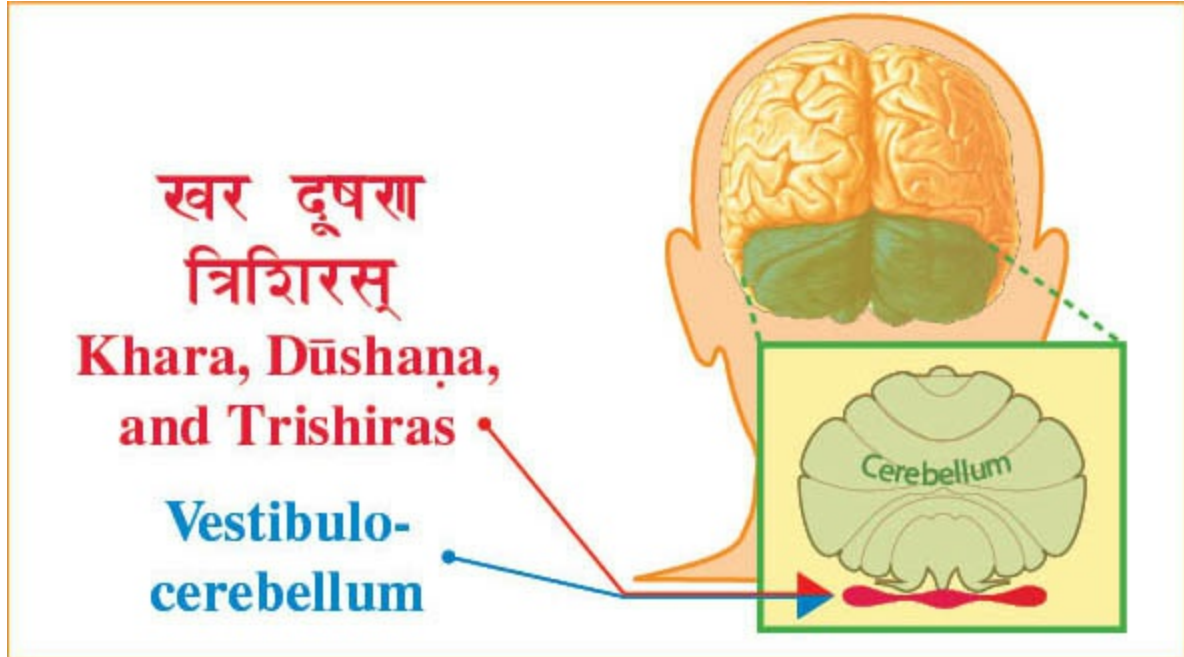


Figure 17.21 The *Rākshasas* Khara, Dūṣhaṇa, and Trishiras correspond to the vestibulocerebellum (imbalanced function).

When Rāvaṇ saw Sītā, however, he wanted to possess her and abduct her, and he convinced the *Rākshasa* **Mārīcha** to take the form of a golden deer (**Location 30**) for the purpose of deceiving her and luring her into his grasp. Rām pursued the deer at Sītā's insistence, leaving her unguarded. Once Sītā was abducted, Rām immediately began to search for her. He soon met the *Rākshasa* **Kabandha** in the Daṇḍak forest, who corresponds to the caudate nucleus and putamen (**Location 31**). The caudate nucleus and putamen are part of the basal ganglia located deep within the centre of the brain, but they also send fibres to the brainstem. Kabandha told Rām that the *Vānara* king Sugrīva would help find Sītā, and so Rām travelled next to **Kishkindhā**, where he first met Hanumān and subsequently Sugrīva, Vālī, Tārā, and Angada (**Location 32**).

Kishkindhā corresponds to an area called the area postrema, which is at the tip, or apex, of the fourth ventricle. The area postrema is one of the circumventricular organs, a part of the brain in which there is interaction between the hormones circulating in the blood and the central nervous system.

The central nervous system is protected by the blood-brain barrier, which is like a wall protecting the brain from certain biochemicals in the blood. At the same time the brain must be aware of everything taking place within the physiology. One way that it receives information is through the nerves, but the brain must also be aware of what is happening in the blood in order to check hormone levels, etc. There must be a window that allows the brain to look into the blood system, but it must be very restricted so that unwanted elements are not able to rush into the brain and create havoc. The brain must be settled, silent, and capable of performing its balancing effect from the *Purusha* level, from the level that is the controller of the wholeness of the physiology.

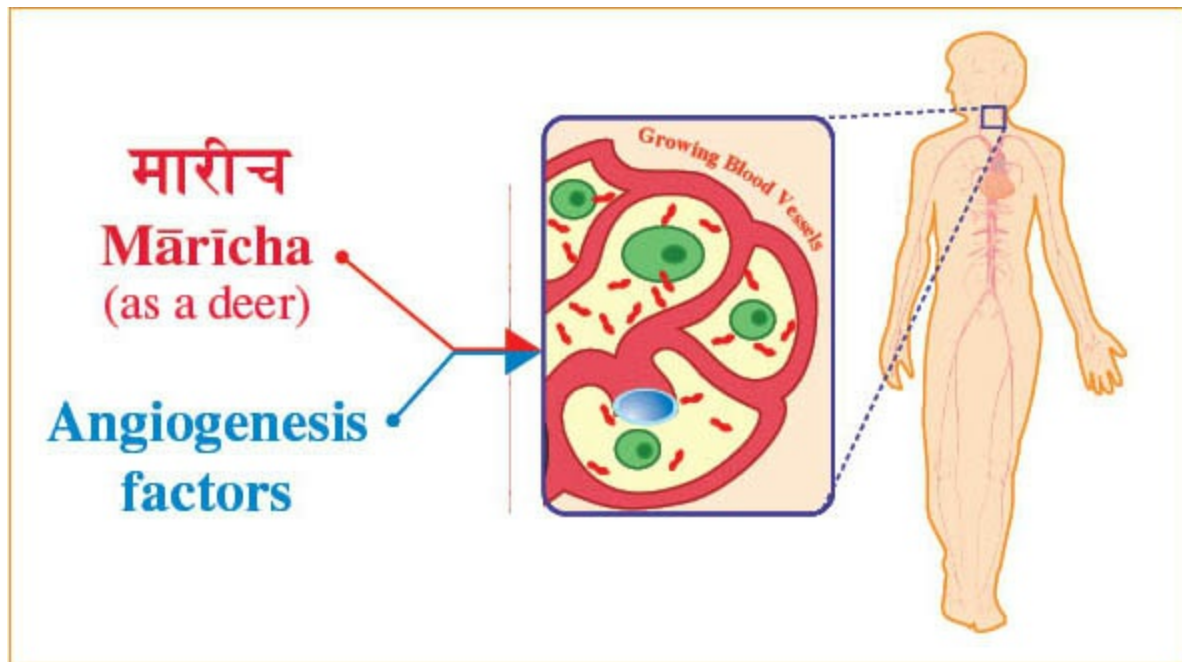


Figure 17.22 The *Rākshasa* Mārīcha corresponds to angiogenesis factors (growth of new blood vessels).

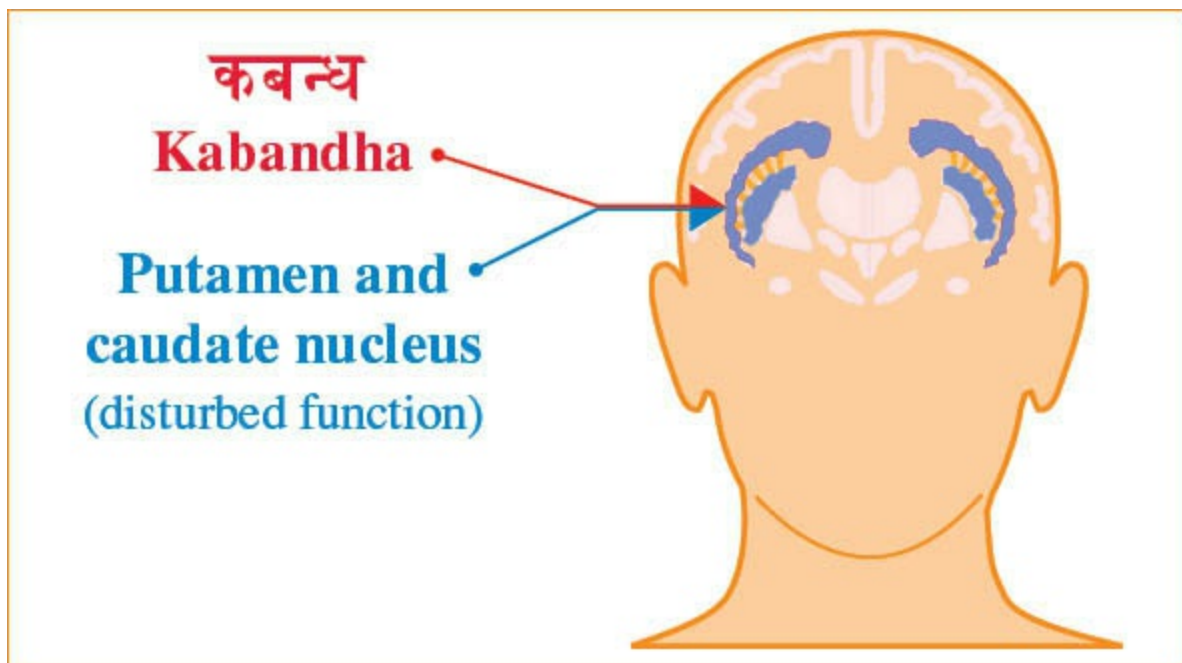


Figure 17.23 The *Rākshasa* Kabandha corresponds to disturbed functioning of the putamen and caudate nucleus.

The physiology solves this requirement by creating ‘fenestrations’. *Fenestra* is Latin for ‘window’, and fenestrations are openings in the blood-brain barrier that enable biochemicals to enter the brain. They are like tiny windows that allow the wholeness of the brain to see what is taking place in the physiology. Since Hanumān is the embodiment of the hormonal system, Rām’s first meeting with him must correspond to an area in which the nervous system can directly detect the level of the hormones—in one of the circumventricular areas in which there is no blood-brain barrier. In this case it is the area postrema, with its fenestrations.

Kishkindhā refers to a large region and not necessarily to the specific location of Rām and Hanumān’s first meeting. In ancient times Kishkindhā included a significantly large territory, but today there is no area with that name, so it is difficult to pinpoint its location in the body.

Kishkindhā was ruled by Sugrīva and Vālī, who were the kings of the *Vānara* at different times. Vālī corresponds to the pituitary stalk and posterior pituitary gland and Sugrīva to the anterior pituitary gland. After the initial fight between Sugrīva and Vālī, Sugrīva went into hiding with Hanumān, and Vālī assumed the throne. Sugrīva and Hanumān’s hiding place corresponds to the area postrema, where Rām and Hanumān first met.

Hanumān, Sugrīva, and Angada joined in the search for Sītā and eventually Hanumān located her in Lankā.<sup>5</sup> In order to allow his army to cross to Lankā, Rām constructed a bridge called by the Sanskrit name *Nalasetu*. This bridge crossed the sea between India and Lankā. The sea corresponds to the fourth ventricle, which lies between the brainstem and cerebellum and is filled with cerebrospinal fluid.

This bridge corresponds to the cerebellar peduncles, which connect the brainstem with the cerebellum. In our overview chart it would be difficult to show the peduncles without covering other structures, so instead we have located their starting point in an area called **Rāmeshwaram (Location 33)**.

The cerebellar peduncles—*Nalasetu*—also connect to the higher areas of the brain, to the heavens. This is the path Vibhīshaṇ took to go to Rām after he had taken control of Lankā, the cerebellum. (The fibres from the dentate nucleus—Vibhīshaṇ—exit the cerebellum through the superior cerebellar peduncle.) We also saw that Hanumān flew to the Himālayas, and even Rāvaṇ used to fly in Pushpak, the chariot he had captured from Kuber; and Rām and Rāvaṇ’s final battle took place in the air between the Sun and Moon in the heavenly abode. This activity in the air corresponds to higher areas of the brain.

Rām’s first encounter in the cerebellum was with Rāvaṇ’s youngest brother, Vibhīshaṇ, who became his devotee. **Vibhīshaṇ (Location 34)** corresponds to the dentate nucleus in the cerebellum. Rām next battled Rāvaṇ’s son, **Indrajit (Location 35)**, who corresponds to the mind of the cerebellum. Following his battle with Indrajit, Rām fought and slayed Rāvaṇ’s other brother **Kumbhakarṇa (Location 36)**, who corresponds to the fastigial nucleus in the cerebellum. At last Rām engaged **Rāvaṇ (Location 37)**, who corresponds to the lateral hemisphere of the cerebellum in the final battle.<sup>6</sup> Although this was not his first encounter with Rāvaṇ, it was certainly the most important.

Rām finally returned to Ayodhyā. In its fullest sense, Ayodhyā is the embodiment of individual and collective perfection, and includes both Heaven and Earth, and therefore the entire physiology.



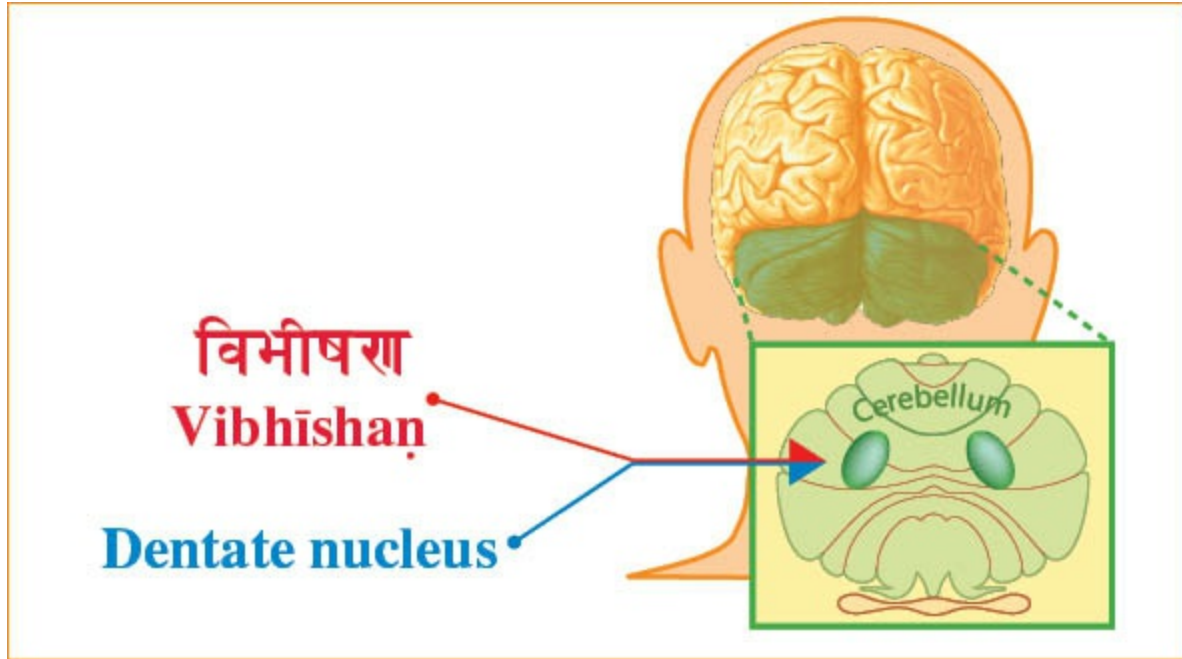


Figure 17.24 Vibhīshaṇ, a brother of Rāvaṇ, corresponds to the dentate nucleus of the cerebellum.

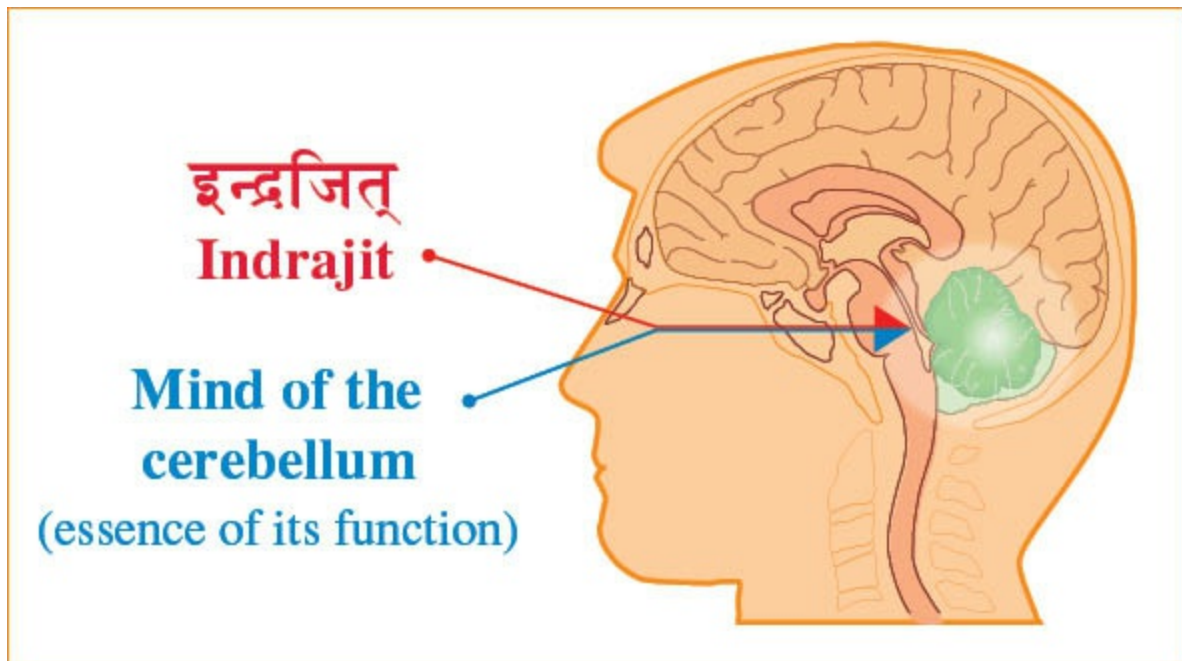
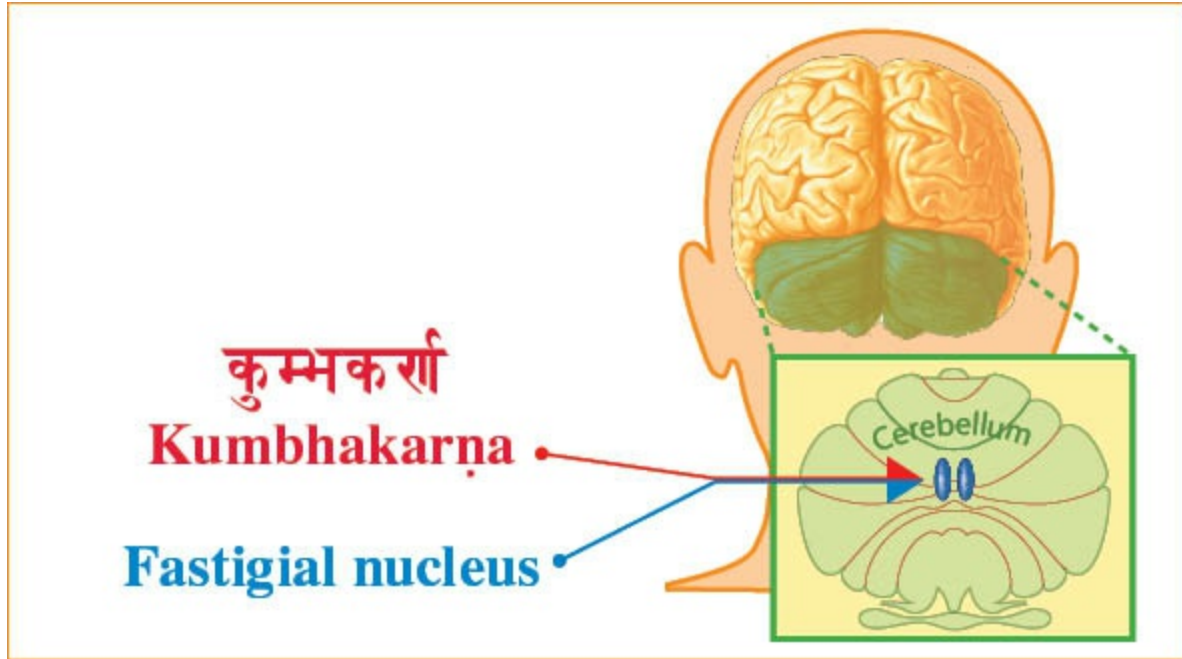


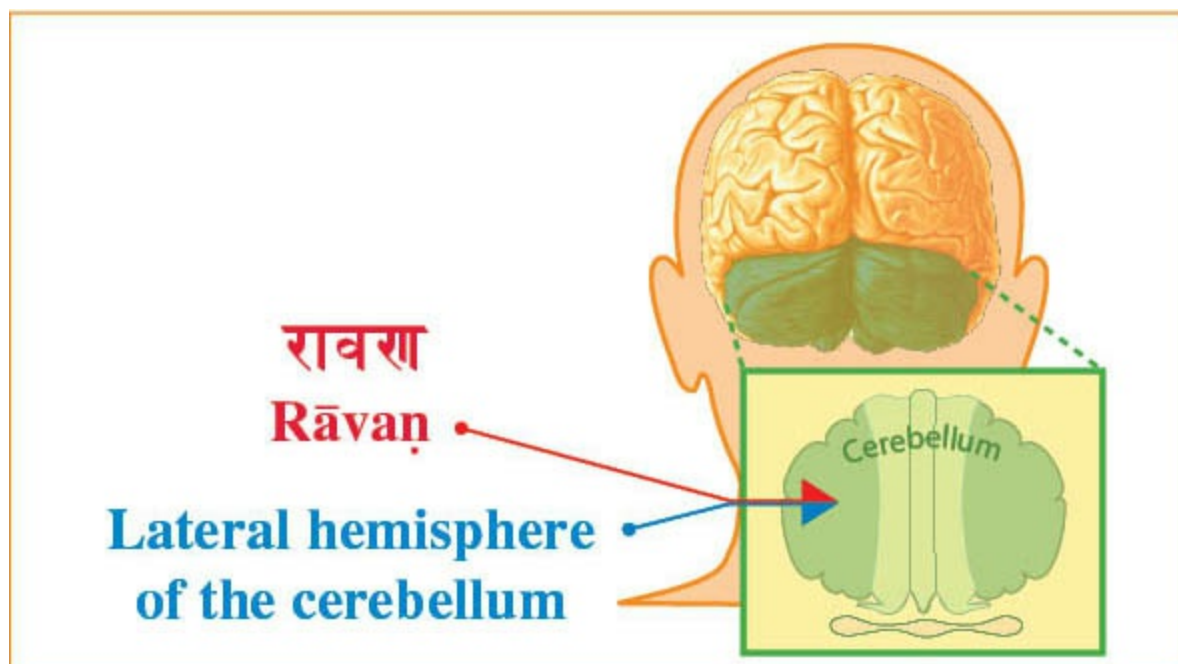
Figure 17.25 Indrajit, the eldest son of Rāvaṇ, corresponds to the mind of the cerebellum (the essence of its function).





**Figure 17.26 Kumbhakarṇa, a brother of Rāvaṇ, corresponds to the fastigial nucleus of the cerebellum.**

In this chapter, we have traced Rām's path and the highlights of his meetings with *Ṛishis* and his battles with *Rākshasas*. Each of these individuals, places, and events corresponds precisely to the structures and functions of our physiology. In reviewing Rām's path through all these locations, and in understanding the relationship of each to the human physiology, we have gained a profound understanding of the significance of the Rāmāyaṇ in terms of our own physiology, and in terms of the importance of Wholeness establishing control over the totality of our brain and all physiological functioning.



**Figure 17.27 Rāvaṇ corresponds to the lateral hemisphere of the cerebellum.**

### **The *Ṛishis* in the Brainstem**

The *Ṛishis* are the enlightened custodians and teachers of Vedic Knowledge, and a source of great wisdom for every area of life.<sup>7</sup> During his exile, Rām encountered many *Ṛishis*, and we may assume that these include the principal *Ṛishis*, the *Sapta Ṛishis*, who have a special significance both in the Vedic Literature and in human physiology. The whole cosmos is present within each of us, and thus each of the *Sapta Ṛishis* is present in the Vedic Literature as specific sounds, in the sky as the seven stars of the big dipper—or big bear (Ursa Major)—and they are all located in our physiology as the seven longitudinal columns of the brainstem.

We can determine their precise physiological location by looking at cross and sagittal sections of this area in the brain (figure 17.28 & figure 17.29). We must remember, however, that these sections provide only a two-dimensional image, whereas a three-dimensional view would show a more realistic perspective of how the seven major columns are situated in the brainstem. In

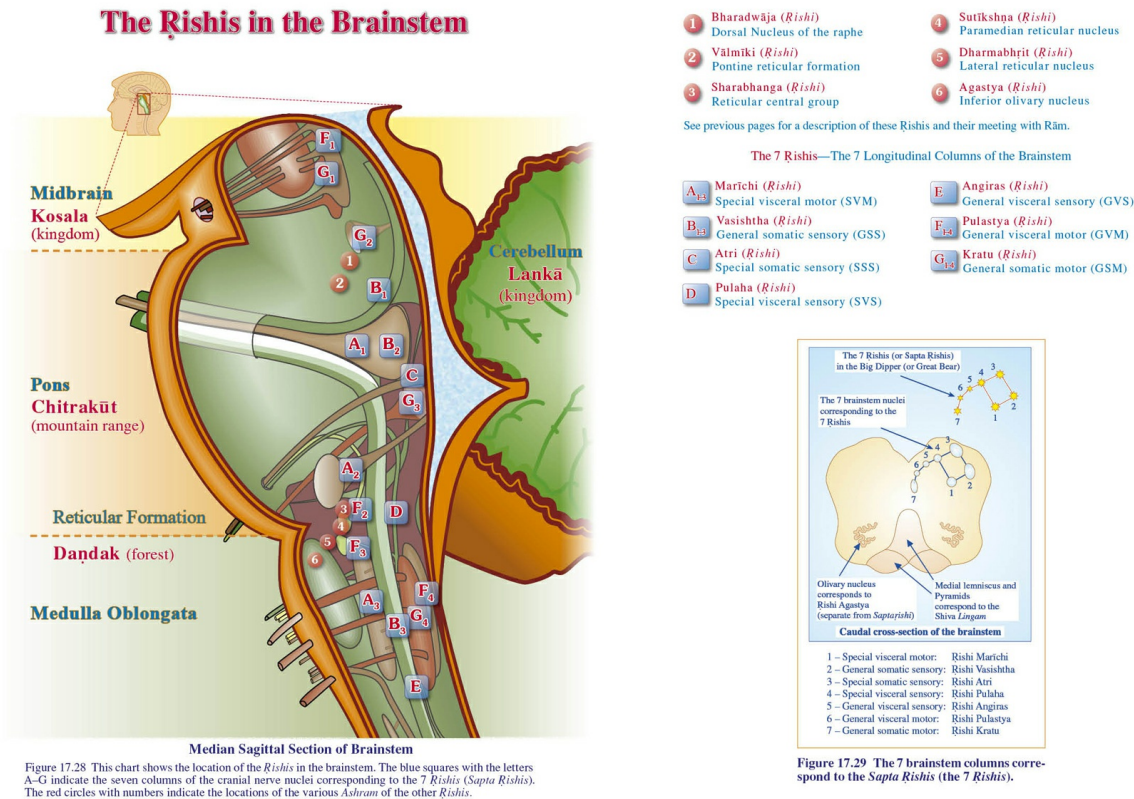
figure 17.29 we can see a striking similarity between the cross section of the columns and the arrangement of the stars in the heavens.

The first of the *Sapta Ṛishis* is Marīchi. **Marīchi** corresponds to the first column, called the special visceral motor column (**Location A<sub>1-3</sub>**). The special visceral motor column is the most forward or anterior of the columns, and consists of a cluster of four nuclei. It is mainly responsible for the control of facial expression as well as the control of the pharynx and larynx, including the vocal cords, jaw, and neck. Marīchi is described in the Bṛihat Saṁhitā as a controller of *Gandharvas*, who are celestial musicians and singers. The relationship between control of facial expressions, the laryngeal and pharyngeal muscles, and the vocal cords and singing highlights the functional correspondence between Ṛishi Marīchi and the special visceral motor column.

The next chart shows both Figure 17.28 and 17.29. (Double tap on image to enter zoom mode.)

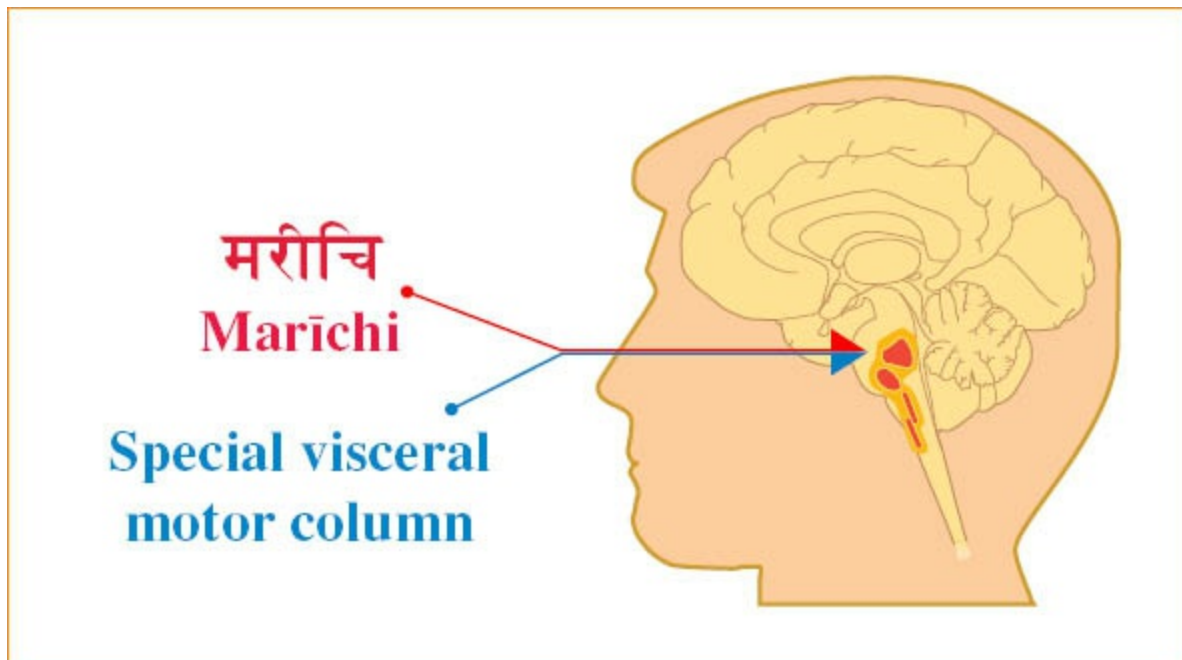
Figure 17.28 shows the location of the *Rishis* in the brainstem. The blue squares with the letters A–G indicate the seven columns of the cranial nerve nuclei corresponding to the 7 *Rishis* (*Sapta Rishis*). The red circles with numbers indicate the locations of the various *Ashram* of the other *Rishis*.

Figure 17.29 The 7 brainstem columns correspond to the *Sapta Rishis* (the 7 *Rishis*).

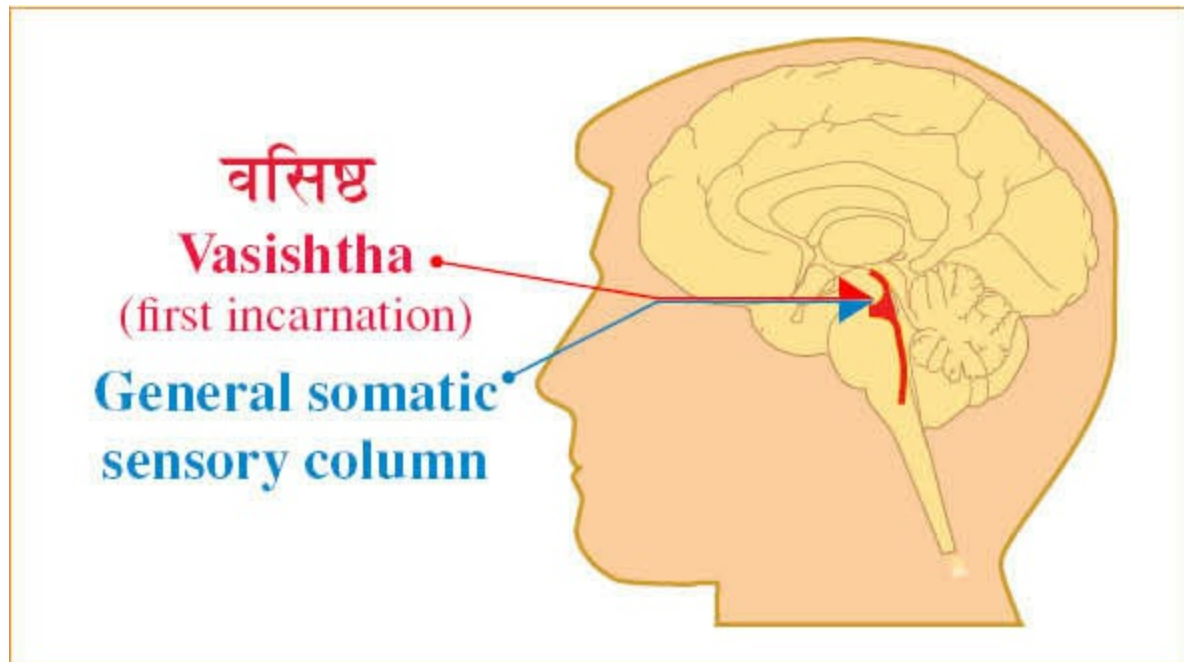


The second column is called the general somatic sensory (**Location B<sub>1–3</sub>**), which is mainly responsible for sensations from the skin of the head and the neck, including sensations from the hair covering these areas. It also innervates some parts of the mucous membranes of the mouth. This column

corresponds to **Ṛishi Vasishtha**, who is described in the Bṛihat Samhitā as the controller of certain tribes and hermits, as well as those areas of the world that are forested. If we compare the hairy areas of the body with the forested areas in the world, we can say that there is a resemblance and relationship in terms of the general somatic sensory area. As we discussed in Chapter VII, Ṛishi Vasishtha had several incarnations in which he performed different functions.<sup>8</sup> In the Rāmāyaṇ he has a very powerful role as preceptor, guiding Dasharath and all of Rām's family.



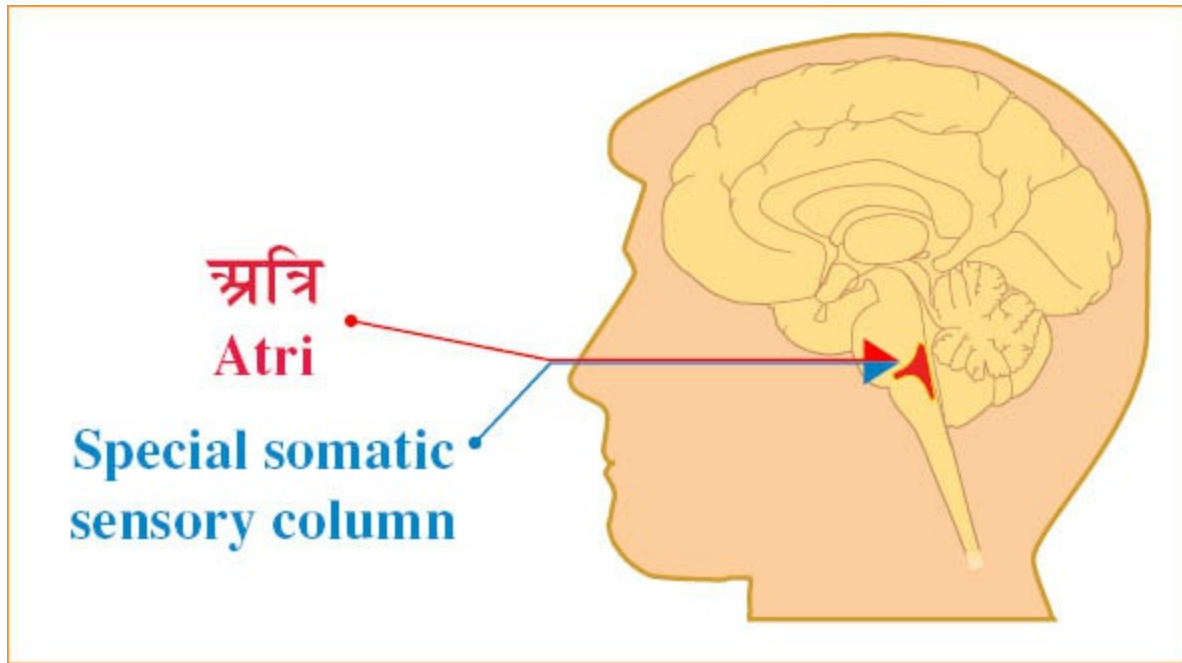
**Figure 17.30 Ṛishi Marīchi corresponds to the special visceral motor column of the brainstem.**



**Figure 17.31 Ṛishi Vasishtha's first incarnation corresponds to the general somatic sensory column of the brainstem.**

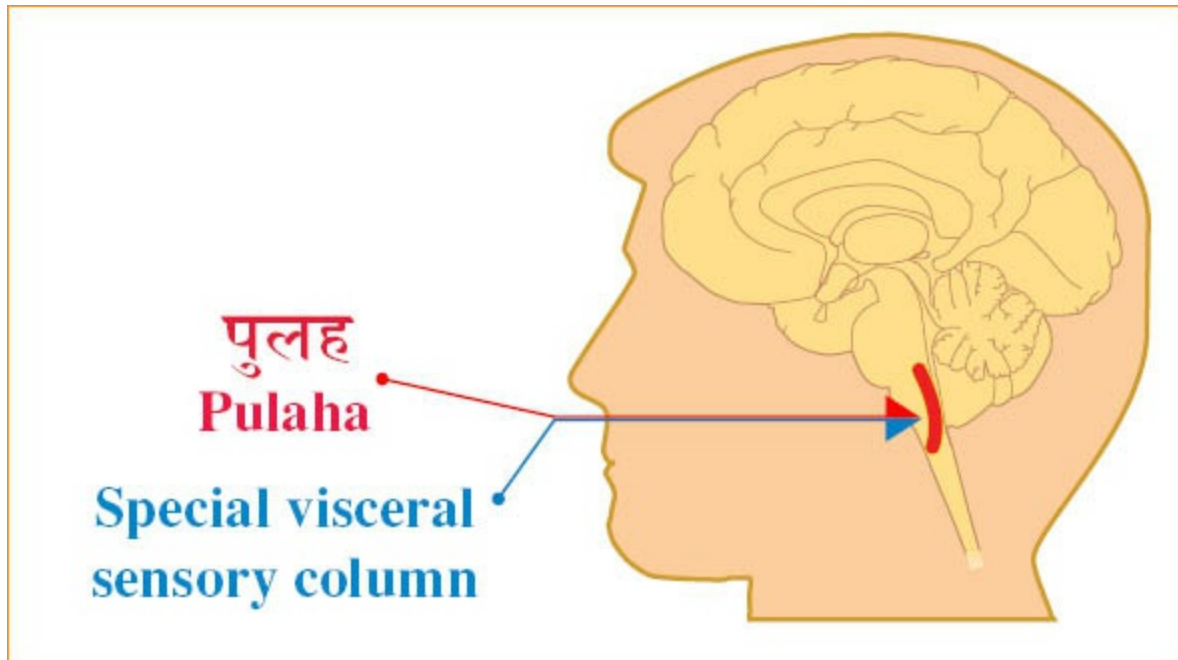
**Ṛishi Atri** corresponds to the special somatic sensory column (**Location C**), which is responsible for hearing, vision, and balance. Atri is an ancestor of Vishwāmitra who corresponds to the vestibular system.<sup>9</sup> This highlights the functional correspondence between Atri and the special somatic sensory column.





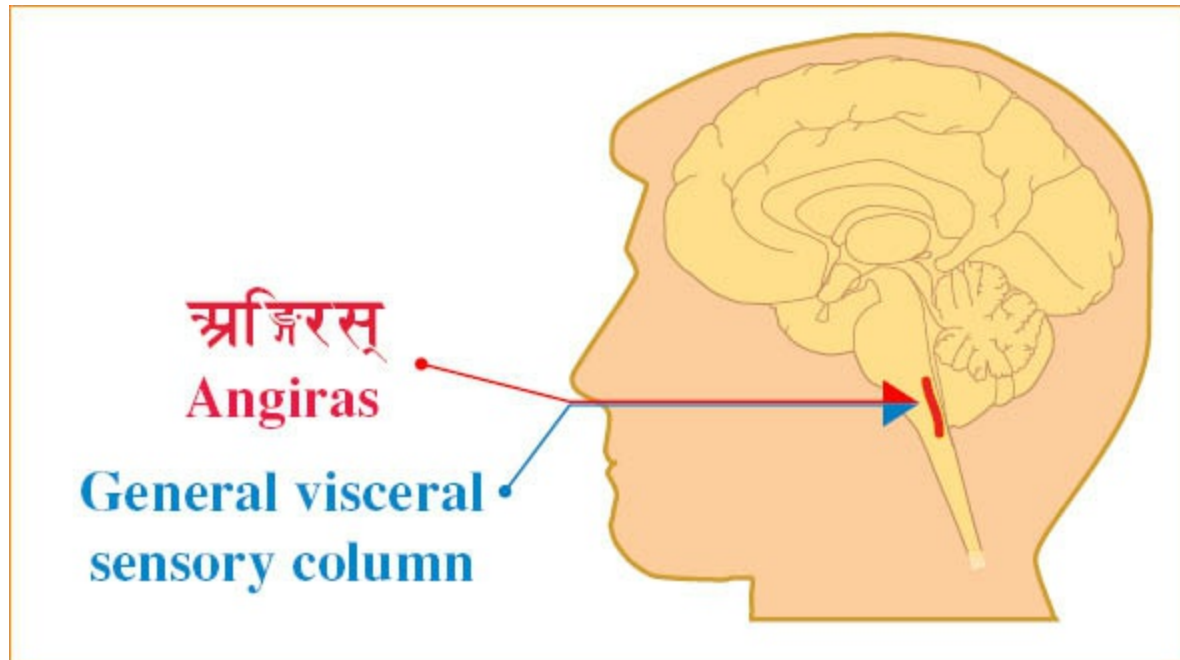
**Figure 17.32 Ṛishi Atri corresponds to the special somatic sensory column of the brainstem.**

The special visceral sensory column is responsible for taste and smell, and corresponds to **Ṛishi Pulaha (Location D)**, who is described in the Bṛihat Saṁhitā as the controller of food products that grow under the earth: roots, bulbs, and vegetables such as radishes, potatoes, etc. Smell and taste refer to food elements, so we can see the functional correspondence between Ṛishi Pulaha and the special visceral sensory column.



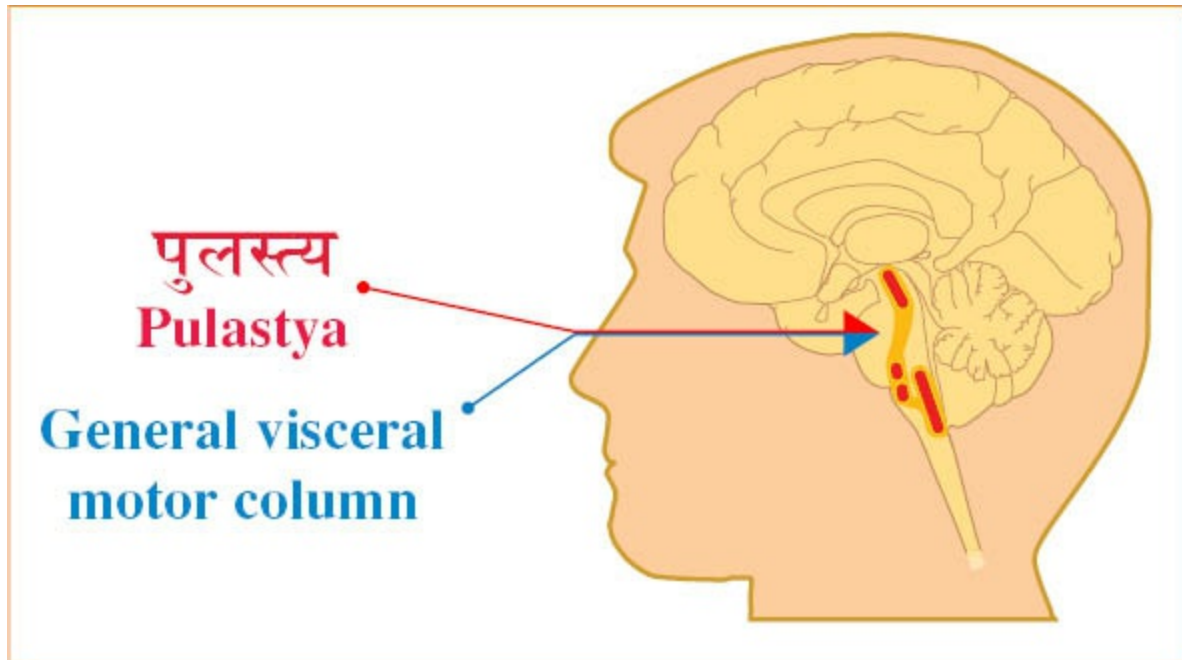
**Figure 17.33 Rishi Pulaha corresponds to the special visceral sensory column of the brainstem.**

**Rishi Angiras (Location E)** corresponds to the general visceral sensory column, which is responsible for sensations from the heart, the pharynx, the larynx, and the gut. According to the Vedic Literature Angiras is related to fire and considered to be the first son of Agni. He is also related to the ocean, rivers, and watery places. For example, the Mahābharat<sup>10</sup> describes Angiras drinking the entire ocean, and then creating new springs of water to drink. He is also connected with digestion, fasting, and Atharva Veda. The physiological areas covered by this column, particularly the heart and gut, resemble watery places and rivers in the flow of blood and food. The gut is also the seat of Agni, the digestive ‘fire’. This highlights the functional correspondence between Rishi Angiras and the general visceral sensory column.



**Figure 17.34 Ṛishi Angiras corresponds to the general visceral sensory column of the brainstem.**

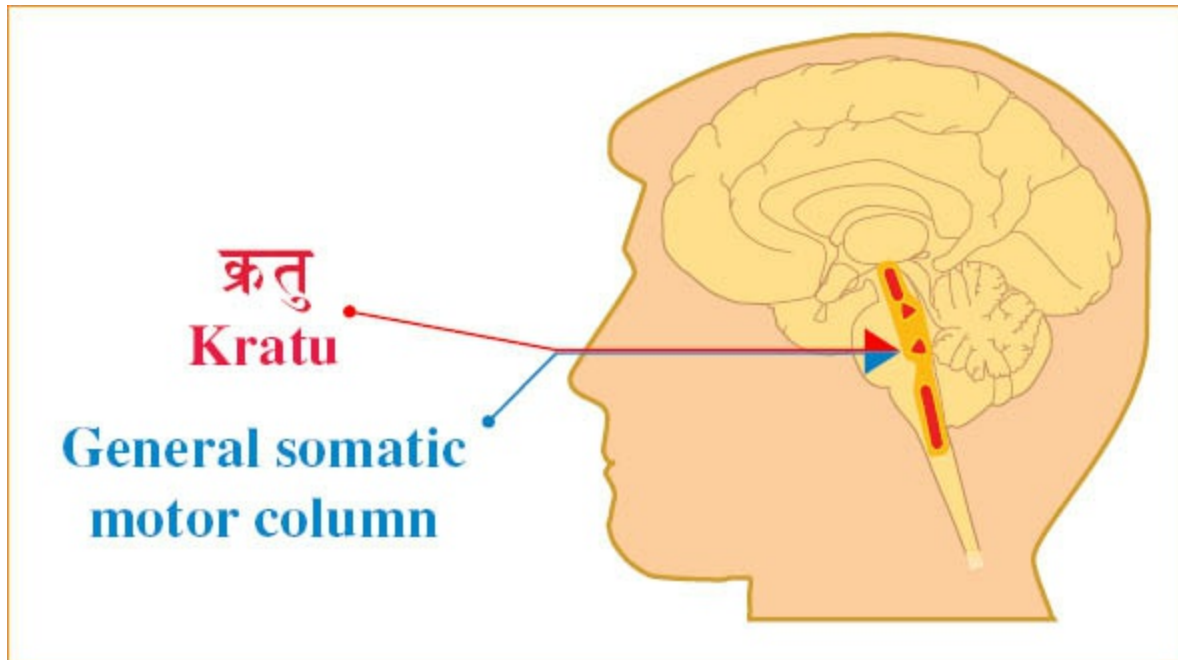
**Ṛishi Pulastya** corresponds to the general visceral motor column (**Location F1–4**), which is responsible for the control of tears and salivation. The general visceral motor column also promotes excitation of the gut, resulting in increased motility in the intestines, and has the ability to slow the heart—or even stop it if it becomes over-stimulated. It can also cause constriction of the bronchi. This column also regulates the activity of the neurons that innervate the blood vessels.



**Figure 17.35 Ṛishi Pulastya corresponds to the general visceral motor column of the brainstem.**

Ṛishi Pulastya is the grandfather of Rāvaṇ, and is described in the Bṛihat Saṁhitā as presiding over the races of *Rākshasas*, demons, devils, giants, and serpents, all of whom are the perpetrators of sorrows and stress. The relationship between these mental conditions and tears, sweating, saliva, blood, the stimulation of the digestive tract, bronchoconstriction, as well as the depression of the heart, highlights the functional correspondence between Ṛishi Pulastya and the general visceral motor column.

The last of the *Sapta Ṛishis* is **Kratu**, who corresponds to the general somatic motor column (**Location G<sub>1-4</sub>**). The general somatic motor column lies closest to the midline and has four nuclear groups, one on top of the other. It is mainly responsible for the control of the extra-ocular muscles and the intrinsic muscles of the tongue.



**Figure 17.36 Ṛishi Kratu corresponds to the general somatic motor column of the brainstem.**

The Bṛihat Saṁhitā describes Kratu as a controller of *Yagya* and other Vedic Performances, which requires many factors such as the opening and closing of the eyes and the ability to look in all directions. The general somatic motor column also involves the tongue muscles in relation to speech, and therefore is fundamental to the ability to recite Veda in the manner prescribed for *Yagya*.

### ***Footnotes***

1. Vedic Sounds used to gain the support of Natural Law.
2. Dasharath's kingdom is traditionally known as Kosala. However, the name of its capital city, Ayodhyā, is often used to indicate the entire kingdom. The term Ayodhyā has come to be associated with Rām, and though it could be said that the position of Ayodhyā in the physiology corresponds at the beginning with Dasharath and his kingdom in the midbrain, more accurately it is an area that grows as Rām expands his control and influence over more of the physiology. Ultimately, as the kingdom of Rām covers all areas of life, Ayodhyā becomes the entire physiology. Rām is *Brahm*, Totality, and the

kingdom of Rām is everywhere, with dominion over everything. When life everywhere is in accord with Total Natural Law, the true Ayodhyā—the kingdom of Wholeness, Totality, pure Being—is enlivened everywhere.

3. See Chapter VI, [Vālmīki Records the Rāmāyaṇ](#).

4. See Chapter XII, [Rām’s Encounter with Virādha](#).

5. See Chapters [XIII](#) and [XIV](#).

6. Rām was destined to win over the cerebellum with its connections and activities, and therefore the battle was focused on the cerebellum and its total functioning. However, during the battle the participants rose into the sky above the actual cerebellum and fought in higher areas of the brain. These areas are involved in the overall outcome of cerebellar activity, as described in Chapter XVI, p. 262. At this point, the final battle involves more than the geographical structure of India and Lankā or the Earth—it involves destiny on a cosmic level, which explains why it took place near the Sun and the planets.

7. See Chapter V, [Rishis](#).

8. See Chapter VII, [The Role of Vasishtha in Human Physiology](#).

9. See Chapter VIII, [Vishwāmitra](#).

10. Anushāsana Pārva, 153.3.





# Chapter XVIII

## The Story of Sītā

### Purusha and Prakṛiti

Within the oneness of pure existence, two values, *Purusha* and *Prakṛiti*, maintain all the energy, power, intelligence, and organizing power of Natural Law. In Chapter III we saw the reality of *Purusha* and its three values of Brahmā, Shiva, and Viṣṇu, and in Chapter IV we saw the reality of *Prakṛiti* in terms of Saraswatī, Durgā, and Lakshmī.

We may recall from Chapter IV that the three values of *Prakṛiti* from the perspective of Mother Divine are found in terms of qualities that create structure and function. *Prakṛiti* plays the functional role in the process of creation and evolution, which gives shape and structure to pure, unmanifest intelligence and energy.

Sītā in her essential reality is pure *Prakṛiti*. Sītā's birth was not a human birth: she was born from the furrow of a field during its preparation for a *Yagya*. Janaka, her father, described her birth as follows:

अथ मे कृषतः क्षेत्रं लाङ्गलादुत्थिता ततः  
क्षेत्रं शोधयता लब्धा नाम्ना सीतेति द्विद्यश्रुता  
भूतलादुत्थिता सा तु व्यद्व्यर्धत ममात्मजा

*Atha me kṛishataḥ kshetram lāngalād utthitā tataḥ  
kshetram shodhayatā labdhā nāmnā Sītā iti vishrutā  
bhūtalād utthitā sā tu vyavardhata mamātmajā  
(Bāl Kāṇḍ 66, 13–14)*

*Immediately there arose from the track of my plough, as I was tilling the field, a female baby, who was discovered while preparing the field for*

*Yagya performance. She was widely known by the name Sītā. This daughter of mine, who had risen from the Earth, grew up over time.*

And in the *Yuddha Kāṇḍ*, when Sītā was on the verge of entering the fire to prove her purity, she faced Rām and made it clear that she was not a common woman—she was indeed from a different reality. In her words:

उपदेशो मे जनकान्नोत्पत्तिद्वर्धसुधातलात्  
मम द्वर्धत्तं च द्वर्धत्तज्ञ बहु ते न पुरस्कृतम्

*Upadesho me Janakānna utpattir vasudhātalāt  
mama vṛittam cha vṛittagya bahu te na puraskṛitam  
(Yuddha Kāṇḍ, 116.15)*

*Only my name (e.g., Jānakī or Vaidehī) was from King Janaka, since at birth I arose from the Earth. My conduct has not been honoured by you either, O knower of good conduct.*

Sītā reminded Rām that her essential nature was pure *Prakṛiti*—that she was the unbounded, holistic value of Mother Divine, the highest level of activity in the unfoldment of the Rāmāyaṇ.

What is the purpose of this exalted level of activity? The Rāmāyaṇ is a display of creation and destruction, the display of the total evolution of life. On the manifest level, the evolution of life occurs in steps of growth and expansion, with each step always referring back to the Self. An expression from Ṛk Veda, which we have cited several times in previous chapters, beautifully expresses how Totality expresses itself again and again:

नद्वद्योद्वद्ध नद्वद्यो भद्वद्यति जायद्वद्धमानः

*Navo-Navo bhavati jāyamānaḥ  
(Ṛk Veda 10.85.19)*

*In the process of transformation, or evolution,  
it is the Totality that is reborn again and again.*

The reality of life is always found in newer and newer ways—new and yet always the same. This newness in the growth and expansion of life in the manifest field of creation takes place through *Prakṛiti*, but *Prakṛiti* can only give expression and create novelty and expansion on the basis of the intelligence and energy of *Purusha*. *Purusha* has the ‘plan’ and is the source of non-manifest unbounded energy. *Prakṛiti* creates according to the ‘plan’ and transforms the potential energy of *Purusha* into expressed energy, and into the physical, manifest building blocks, structures, and all expressions in creation.

*Purusha* is pure Being, always self-referral, and the true container of pure intelligence and energy. *Purusha* is the infinite source of dynamism in Vishṇu, the infinite silence in Shiva, and the organizing intelligence in Brahmā. These three are the unmanifest potentiality that grows in steps of expansion by means of the organizing power and structuring dynamics of *Prakṛiti*. The Rāmāyaṇ is therefore the story of Sītā, the force that moves the absolute pure Being and infinite potential into newer and newer levels of expression, manifestation, and creation. Sītā as if moves Rām to the field of manifestation so that he is expressed in steps of activity, expansion, and evolution.

Rām lived in bliss consciousness, for he was Lord Vishṇu—born totally fulfilled, totally happy. He accomplished everything with perfect ease. He went willingly into the forest with Vishwāmitra and destroyed the Rākshasī Tātakā, bringing peace and perfect order to that area. Vishwāmitra told him that he must destroy Tātakā. even though she was a female. *Kshatriyas* like Rām would not normally harm or fight with a female. Vishwāmitra told him not to be concerned because she represented a situation in which the natural evolutionary progression of life had been disturbed. Remembering his father’s instruction to always obey Vishwāmitra’s directives, Rām set forth to

kill Tātakā in order to restore the harmony of Natural Law. Tātakā, as we saw in Chapter VIII, corresponds to a disturbed functioning in the pontine artery, which was nourishing an unnatural growth.<sup>1</sup>

In the process of physiological development, it is possible for veins or other parts of the physiology to grow in a direction that is different from the fundamental plan. In such a case it is necessary for the physiology to readjust them, which is the purpose of continuous surveillance mechanisms. For example, the immune system recognizes what is ‘self’ and what is ‘non-self’ so that it can effectively protect and defend the body’s integrity.<sup>2</sup>

In the event of anomalous growth, there are mechanisms of self-repair and adjustment that will destroy individual cells in order to restore order and proper growth. In this process of development, everything is referred back to the information contained in the DNA, which ensures that the physiology is constructed in accord with the perfection of Nature’s plan. Vishwāmitra provided Rām with the knowledge to restore life in accord with Natural Law, which corresponds to the physiological mechanisms that remove destructive elements from the body and restore proper growth and evolution.

## **The Process of Expansion**

In the Vedic Literature, the process of the expression and expansion of Natural Law from the unmanifest field of pure Being is embodied by Shikshā, Kalp, and Vyākaraṇ, the first three aspects of the branch known as Vedāṅga.<sup>3</sup> Shikshā unfolds the quality of expression. The budding of an expressed value leads to its transformations, which are found in Kalp. There are steps of transformation leading to expansion, which are found within Vyākaraṇ. When we expand we go away from the centre, away from the source. Expansion is the nature of life in the relative field of life, but it carries with it the risk of deviating from the source. The farther an expression moves from its source, the more likely it is to lose contact with the original design and become separated or lost in outer fields of expression. Change and complexity necessarily arise, and with complexity there is the novelty of a

new reality expressing itself in the outer aspects of life. This novelty possesses the attractive characteristic of being different from what has come before. This principle is also found in the expression that we cited earlier:

नद्धद्योद्ध नद्धद्यो भद्धद्यति जायद्धद्वमानः

*Navo-Navo bhavati jāyamānaḥ*  
(*Rk Veda 10.85.19*)

*There is constant change and evolution of the same Self.*

We can conceive of the threat of losing contact with the Self—without being established in the Self one can easily act independently of the perfect structure of Natural Law, and as a consequence unwittingly violate Laws of Nature. This is why it is very important to go back to the Self, and this is why Shikshā, Kalp, and Vyākaraṇ are followed in the Vedic Literature by Nirukt. Nirukt embodies the quality of self-referral, which takes the three steps of Shikshā, Kalp, and Vyākaraṇ—each of which is going forward—and brings them back to the Self. This is the mechanism of Natural Law that maintains balance in the field of expression so that expansion always takes place on the basis of the self-referral reality of pure Being. The force of going out, of creating new expressions, must always be present, for this is the power and energy of *Prakṛiti*, and in the Rāmāyaṇ this power and energy is embodied by Sītā.

Sītā's role was to bring the Absolute out of itself, to enable the infinite Self to be expressed in the field of manifest creation. Structures have developed in the human physiology that enable consciousness to become more highly refined than in animals, so that human beings can experience pure consciousness. The physical structures that uphold the nervous system are developed in such a way that they are able to contain the totality of Natural Law, as demonstrated in *Human Physiology: Expression of Veda and the Vedic Literature*. In order for this level of development to take place, there

must be a process of expansion through which new structures and pathways are created that allow the physiology to experience and maintain higher consciousness.

The Rāmāyaṇ is the story of the nervous system's development and thus reveals these steps of expansion, which include the creation of connections between different neurons and the complete development of the cerebellum with its many connections. An example is the intricate and complex development and connection of the lateral hemispheres of the cerebellum to certain parts of the nervous system, in order to enable the experience of Wholeness. This is the story of the Rāmāyaṇ: Rām travelled through the forest and over the sea to Lankā, in this way describing the physiology's growing ability to unfold perfection on every level.

### **The Role of Sītā in the Rāmāyaṇ**

Sītā's role was to take this expansion to the greatest extent possible, overtaking specificity by creating new structures that connect all specific values in such a way that Wholeness is experienced. We have seen that the Rāmāyaṇ is the display of the development of the structures of the entire nervous system, including the cerebellum. Rām saw Sītā for the first time shortly after completing his training with Vishwāmitra, and even from a distance he was immediately drawn to her. She of course felt a similar attraction toward him, and secretly hoped that he would win the contest for her hand in marriage. And it was by bending and breaking Shiva's bow, the bow of silence, and thus establishing himself as the supreme controller of Natural Law, that Rām won the right to marry her.

The significance of breaking Shiva's bow is that this bow of silence became dynamic through the power of Rām, the incarnation of Vishṇu. Sītā would not—could not—accept anyone else as her husband. No one other than Rām could be her *Purusha*, for only he could take the entire wholeness of silence—the totality of Shiva's expressions, symbolized here in the bow—and cause it to be dynamic. This ability is only vested in the holistic value of Vishṇu



himself. Sītā would never be able to accept anyone other than Rām, because she understood the greatness of the task. It may appear as a subconscious understanding on her part, but in reality it is inherent in her true nature, for she is the embodiment of *Prakṛiti*, moving the story of the Rāmāyaṇ forward.

After Sītā and Rām had been married for some time, the story of Rām's exile unfolded. Sītā naturally insisted on accompanying Rām to the forest, where a *Rākshasa* named Virādha tried to abduct her, but he was thwarted by Rām. As we may recall, Virādha corresponds to an abnormality in the autonomic nervous system that tries to take over the heart, which the totality of the central nervous system, represented by Rām, will not allow.<sup>4</sup> As the central nervous system, Rām is responsible for the holistic functioning of the body, and therefore every part of the physiology must ultimately serve him.

Next we learn of Sītā's attraction to the golden deer, which is really the *Rākshasa* Mārīcha helping Rāvaṇ abduct her. It is almost as if Sītā allowed herself to be captured by Rāvaṇ even though it was not in her interest to be with him—her responsibility was to identify or 'mark' Rāvaṇ, thus leading Rām to him. This means that she drew the attention of the higher parts of the brain to oversee the new evolutionary structures in the physiology. In this perspective we should not think of Rāvaṇ as a force of darkness or an element of negativity; Rām's final defeat of Rāvaṇ corresponds to the restoration of cerebellar functioning to be in accord with the entire physiology.

Rām would never have been drawn to Rāvaṇ unless Sītā played her role and brought him to Rām's awareness. We have previously discussed different tagging or marking systems, such as the antigen-antibody system, which are initiated by immune cells within the blood and circulatory system.<sup>5</sup> These are controlled by Sītā's *Prakṛiti* value in the heart. It is the anomaly represented by Rāvaṇ—an increased activity in the new structures of development in the cerebellum—that drew the attention of the cardiovascular system and ultimately caused the holistic value of the nervous system to correct

imbalances in that area.

In a systematic progression, Sītā was first attracted to the deer and then sent Rām to capture it for her. Mārīcha disguised as the golden deer represents a hormone that attracts blood vessels and causes them to grow. When Sītā sent Lakshmaṇ to protect Rām, it is as if she was permitting herself to be tricked and kidnapped by Rāvaṇ, thus enabling subsequent events to unfold so that Rām would build a bridge to Lankā, destroy Rāvaṇ, and establish Ayodhyā as an ideal society worldwide.

Sītā's behaviour is misunderstood if we think that she was fooled into sending Rām after the deer. Indeed, why would Rām, the great *Avatār* of Viṣṇu, not know that the deer was an illusion and place himself in a trap? And wouldn't Sītā, the essence of the divine power of *Prakṛiti*, know not to send Lakshmaṇ?

The reality is that Rām and Lakshmaṇ responded to environmental conditions—the Absolute created a reality in the manifest field and then responded to it in accordance with the necessities and complexities of the situation. When one aspect of creation manifests, it creates a breaking of the symmetry, an agitation or ripple. On the surface level these ripples cause a response from the Absolute to adjust them and put them back in order. It is not that the Absolute is deluded, for it is completely aware of what is taking place and is correcting the process as evolution unfolds.

In this instance it was necessary for *Prakṛiti*, Sītā, to appear to be fooled by the deer, and for *Purusha*, Rām, to go and search for it. It was also essential for Sītā to be abducted by Rāvaṇ so that Rām would then search for her and destroy him. These are highly specific responses, steps of evolution in the field of life, which are governed by Wholeness, unmanifest *Purusha*, pure Being. These specific responses may give the impression of being isolated or inappropriate, but they are purposeful and allow the goal to be reached within the context of the whole. This is the story of Sītā's power, which ultimately caused Rām to destroy Rāvaṇ and become the ruler of an enlightened

civilization free of problems and suffering and full of affluence and peace.

Sītā has the power to be perfectly attuned to Natural Law, with her mind focused only upon Rām. From the beginning she refused to be married to anyone other than the one who could bend or break Shiva's bow. Even when she was imprisoned by Rāvaṇ, and during the height of the battle, she did not waiver from the one-pointed, self-referral reality of Rām, who embodies the totality of Natural Law. Indeed, Sītā herself stated that she was incapable of deviating from Dharma, from the evolutionary power of Natural Law:

धर्माद्विचलितुं नाहमलं चन्द्रादिद्वय प्रभा

*Dharmād vichaliturṁ nāham alam chandrād iva prabhā*  
(*Ayodhyā Kāṇḍ*, 39.28)

*I am not able to deviate from Dharma any more than the rays can diverge from the Moon.*

This is how Sītā was able to contribute to Rām's victory in the battle—this is how *Prakṛiti*, even while functioning in the relative, maintains its connection to the Absolute and ensures that all relative expressions are holistic in their nature.

## The Ordeal of Fire

After the battle, Rām unexpectedly kept his distance from Sītā, indicating that he did not want her with him. He explained that he knew she was pure, but because of rumours amongst the people it was necessary to send her away.

*Prakṛiti* will always take the system forward, it will always move in the direction of creativity, growth, and evolution. *Prakṛiti* always wants Wholeness to be available in the manifest field of life, and will therefore connect *Purusha* with the relative field of expression—into greater and greater values of novelty and creativity. In any process of evolution,

however, first there are steps of achievement, then stabilization, and then another step of progression, just as in walking. These are the alternating cycles of rest, or silence, and activity, which are inherent in Natural Law. While engaging in the manifest field of life *Purusha* remains self-referral, thus the connection with Wholeness is always maintained.

If Rām's behaviour towards Sītā appears harsh, it is because he was responding to a specific requirement of Natural Law; it is as though he was telling her that she had taken him into the field of the relative, he had placed everything in perfect order, and now a time of coming back to the Self for purification and stabilization must be established.

Sītā, or *Prakṛiti*, responded to Rām from a different perspective:

किं मामसदृशं द्वेद्याक्यमीदृशं श्रोत्रदारूणम्  
रूक्षं श्राद्धद्ययसे द्वेदीर प्राकृतः प्राकृतमिद्वद्य  
न तथास्मि महाबाहो यथा मामद्वद्यगच्छसि  
प्रत्ययं गच्छ मे स्द्वद्येन चारित्रेणैद्वद्य ते शपे

*Kim mām asadṛisham vākyam īdṛisham shrotra-dārūṇam  
rūksham shrāḍvayase vīra prākṛitaḥ prākṛitām iva  
na tathāsmi mahābāho yathā mām avagachchhasi  
pratyayam gachchha me swena cāritreṇaiva te shape  
(Yuddha Kāṇḍ, 116.5–6)*

*Why do you address me in this way, O Hero, with words that are so cruel and harsh to the ears, as a common man would to a common woman? Trust me, for I am not as you think me to be, O Mighty-armed. I promise on my own reputation.*

Sītā was telling Rām that he was speaking from a specific perspective—from

that of an ordinary man—and that he had forgotten that her interest was beyond the common interest. Even though *Prakṛiti* draws the Absolute into specific levels of performance, her interest was holistic, not specific.

This exchange can be characterized as Wholeness responding to Wholeness. In this case it is *Prakṛiti*, through her value of Wholeness, that has drawn the infinite potentiality of pure Being into a specific action with the intent to control it from a holistic perspective. Sītā, as *Prakṛiti*, reminds *Purusha* that while the action is specific, *Prakṛiti* truly desires Wholeness.

At the same time, she exclaims that Rām should not interact with her based on rumours, for rumours are illusion, a product of *Māyā*—they are ripples of ignorance within collective consciousness and indicate the level of a society’s evolution. If we become caught in the specific values of the relative then we become lost in illusion, which can lead to a decision that is not holistic.

Every step of development has its own level of understanding—each level of consciousness has its own reality and is supported by a particular expression, or state, within the physiology. In 1972 Dr. Robert Keith Wallace pioneered research on the relationship between consciousness and physiology, showing that different states of consciousness have different levels of physiological activity associated with them. He demonstrated that besides waking, dreaming, and sleeping there are physiological correlates of a fourth major state of consciousness, Transcendental Consciousness. It is the alternation of short periods of deep silence during Transcendental Meditation with dynamic activity in daily life that cultivates the nervous system and develops higher states of consciousness.

In this case, Rām had brought a larger territory under his direct, holistic, balanced, and evolutionary influence. The entire system is now controlled by a more evolved central nervous system, and therefore the rumours that he heard were in effect telling him, from a physiological point of view, not to create any sudden changes or new levels of expansion, as seemed to be the natural desire of *Prakṛiti*. Rather, he felt the need to stop, return to the source,

and stabilize the conditions that he had already achieved. This is the eternal cycle of creation, maintenance, and dissolution that takes place on the basis of always referring back to the Self. When one step takes place on the path of evolution, it presupposes the destruction of the previous state, the creation of a new state, and then the maintenance or stabilisation of that new state. This is repeated for the next level of evolution. At this point in the development of events in the Rāmāyaṇ, a step of maintenance and stabilisation is needed. This step is a quality associated with Viṣṇu, the maintainer. The power of *Prakṛiti* to move creation into newer and newer steps of evolution, and higher and higher levels of manifestation, is balanced by the requirement to always refer back to the Self. This is how proper expansion is secured and assured on the basis of the infinite orderliness and supreme design available in pure Being—*Puruṣa*—Rām—the Unified Field of all the Laws of Nature.

Sītā expressed strongly that the rumours were incorrect, that she was not an isolated value of specificity. Indeed, she was the embodiment of Wholeness and would demonstrate this by walking into the fire. It is important to note that the fire represents a reality that dissolves anything that is specific and disconnected from Wholeness, and therefore Sītā did not burn—she was holistic, possessing complete awareness of Totality.

Nor had Sītā ever been trapped by an isolated specific value. Rāvaṇ was never an interest to her because she was always beyond him. Sītā represents the essential wholeness of the specific value, while Rāvaṇ represents the narrow vision of isolated specificity—he was so specific an anomaly that he had no understanding whatsoever of the whole.

This was the essence of every battle in the Rāmāyaṇ—an isolated specific value against the holistic value. Rāvaṇ attempted to make use of the power of Wholeness for his own specific expressions, which refer to specific values of timing, strength of movement, etc., within the cerebellum. But once the battle was over, these specific values were placed in proper proportion relative to the whole. Such specificity cannot be in any way assigned to Sītā, for it was



never her interest nor her reality.

Sītā is holistic, the Totality and wholeness of Natural Law, and it is essential to understand her in this context. When Rām assumed his role as the supreme leader, the role of *Prakṛiti* seems to have been fulfilled, and it appears as though Sītā was no longer necessary. However, this perception is valid only when *Prakṛiti* is understood to be concerned solely with the specific manifestations of creation. Sītā’s response corrected this misconception, and her exposition of the truth was substantiated by an action that defies Sītā’s apparent relative nature: the fire did not burn her.

When Sītā entered the fire, *Prakṛiti* was effectively saying to Rām that she would no longer draw him into the relative, acknowledging instead that they were at a level of fulfilment in which it was only necessary to go fully into the Self. She went into the fire to show Rām that she could not be harmed or destroyed, because she was the fire—she was Wholeness, Totality. Nothing could touch her. Sītā could have gone into the wind and not been blown away, or she could have immersed herself in water and not been drowned. Fire was chosen because it represents the ability to digest and transform any material object (representing specificity) into ashes. This means bringing back any object to its essential constituents—back to its fundamental elementary nature. The fire also represents the Sun, Sūrya, and Rām descended from the Ikshwāku race, the lineage of the Sun. Sītā entered the fire, melding smoothly and painlessly with that great elemental power.

## **The Cycles of Natural Law**

Finally Agni, the *Devatā* of fire, emerged from the burning pyre, presented Sītā to Rām, and testified to her purity:

अब्रह्मघीत्तु तदा रामं साक्षी लोकस्य पाद्मघकः  
एषा ते राम द्वैदेही पापमस्यां न द्विद्यते  
नैद्वद्य द्वाचा न मनसा नैद्वद्य बुद्ध्या न चक्षुषा  
सुद्वद्यत्ता द्वद्यत्तशौटीर्यं न त्द्वद्यामत्यचरच्छुभा

*Abravīt tu tadā Rāmaṁ sākshī lokasya pāvakah  
eshā te Rām Vaidehī pāpam asyām na vidyate  
naiva vāchā na manasā naiva buddhyā na chakshushā  
suvṛittā vṛitta-shautīryaṁ na twām atyacharachchhubhā  
(Yudhha Kāṇḍ, 118.5–6)*

*Then Fire, the witness of the world, spoke to Rām: ‘Here is Vaidehī  
(Sītā), O Rām; there is no sin in her whatsoever. This lady of ideal  
conduct has not sinned against you, who are of noble conduct, neither in  
her speech, in her mind, in her intellect, nor by her sight’.*

Rām immediately and joyfully took her back to live with him in Ayodhyā, which corresponds to the entire physiology working in a perfectly unified state of pure Being. In such a state there could be no problems, division, or conflict—there would be perfect neuromuscular integration and perfect functioning of the heart, circulatory system, nervous system, as well as all other organ systems. Sītā’s fundamental state and structure are nothing but absolute pure Being, fully integrated and in harmony with Rām, with both the manifest and non-manifest reality of *Brahm*.

At a later time, however, Rām asked an advisor what was happening in his kingdom, inquiring specifically into rumours surrounding Sītā. This means that the physiology is settled and peaceful, but some old memory or unfulfilled desire remains—a quality of excitation has insinuated itself. This is an example of how at a certain stage in the process of growth and

evolution, past *Karma* or past desire can emerge to influence the present in order to provide impetus toward higher levels of development. Until Unity Consciousness is fully developed in the perfect state of *Brahm*—Brahman Consciousness—there will always be some remaining catalyst that will create ripples and prevent stagnation from taking place, and which will further resolve past issues that have not yet been wholly corrected.

In this case, *Karma* manifested as another negative rumour about Sītā. A rumour is a ripple of ignorance, the faint remains of ignorance (*Leshāvidyā* in the Vedic Language), which in this case is the effect of an old memory returning with the passage of time as part of the natural cycle of Natural Law.

In the more holistic and cosmic perspective of the cycles of Natural Law—the cycles of day and night, planetary cycles, cycles of *Yugas*, etc.—*Karmic* influences play their role in supporting Nature’s evolutionary force. The charioteer Sumantra related to Lakshmaṇ that Ṛishi Durvāsā had predicted Rām’s separation from Sītā on the basis of an ancient curse pronounced by the sage Bhṛigu on Viṣṇu. Apparently some evil *Daityas* had taken sanctuary with Bhṛigu’s *Patnī*, angering Viṣṇu. Viṣṇu reacted by severing the head of Bhṛigu’s *Patnī*, enraging the sage. Bhṛigu thus cursed him as follows:

यस्मादद्व्यध्यां मे पत्नीमद्व्यधीः क्रोधमूर्च्छितः  
तस्मात्तद्व्यं मानुषे लोके जनिष्यसि जनार्दन  
तत्र पत्नीद्वियोगं तद्व्यं प्राप्स्यसे बहुद्व्यार्षिकम्

*Yasmād avadhyām me patnīm avadhīḥ krodha-mūrchchhitah  
tasmāt twam mānushe loke janishyasi Janārdana  
tatra patnī-viyogaṁ tvam prāpsyase bahu-vārshikam  
(Yuddha Kāṇḍ, 51, 15–16)*

*Since you have slayed my Patnī who did not deserve to be killed,  
consumed as you are with anger, you will take birth in the world of men,  
O Janārdana (Vishṇu). There you will be separated from your Patnī for  
many years.*

In order for us to properly understand the circumstances surrounding the separation of Rām and Sītā, we must take into consideration larger cycles of Natural Law than may be immediately apparent. We can no longer assume that Rām was responding to a specific rumour and correcting it. Rām’s understanding was holistic and complete, for he fully understood that Sītā could never be separate from him, for she was pure, she was Wholeness.

We also gain insight into the dynamics of Natural Law that lead to creation. Creation itself is a disturbance in the pure oneness of the Unified Field. As Maharishi explains, there are two realities in the field of pure consciousness—infinite silence and infinite dynamism. Because there are two realities, silence and dynamism, both are alert, not wanting to be destroyed by the other. In their alertness, in their wakefulness, lies the seed for the expansion of consciousness.

Pure consciousness is fully awake and therefore has the inherent ability to be conscious. When consciousness becomes conscious, it experiences itself as

the values of knower, knowing, and known. And because these values are also wakefulness they are awake to each other, and thus interact with each other creating ever new values of each other.<sup>6</sup>

In this sequential unfoldment of the wholeness of pure consciousness into more specific values, the intellect can become dissociated from its own origin and question whether the reality of pure consciousness is really Unity. From this doubt duality emerges, leading to all the expressions of the manifest universe. In the seed of this very profound level of pure Being is the value of differentiation that allows physical manifestation to be expressed, and to appear to be different from the non-physical reality of life.

The last stroke of the Rāmāyaṇ brings us to this same cycle of reality. The ripple, or rumour, questions whether *Purusha* is able to accept a *Prakṛiti* that has been attracted by the specific, suggesting that *Purusha* has been misled by *Prakṛiti*. The rumour represents ignorance—*Pragyāparādh*, the ‘mistake of the intellect’ that perceives a disassociation between knower and known. When this is the experience, the intellect interprets the manifestation of physical reality as being different from the oneness of pure Being. But this is all illusion—the reality is that there is no difference and ultimately no manifestation.

## **The Conclusion of the Rāmāyaṇ and Higher States of Consciousness**

### **Rām Frees Sītā: Cosmic Consciousness**

Cosmic Consciousness is a state of liberation, Moksha, in which one experiences the infinite, unbounded Self along with the boundaries of outer experience (see Chapter I: [Cosmic Consciousness](#)). Sītā’s liberation represents the unfoldment of Cosmic Consciousness, the enjoyment of freedom from all limitations and boundaries. At this point in the story Rām was also on the holistic level, as he had neither outside battles nor the need for direct involvement in any action. This is the reality of Cosmic

Consciousness—the inner life is fully awake in its eternal, blissful self-sufficiency, even while one is engaged in the dynamic activities of everyday life. In this state one is ever free, eternally liberated from the binding influences of changing situations and circumstances.

### **The Return to Ayodhyā: God Consciousness**

After Rām and Sītā's return, life in Ayodhyā was known as Rām Rāj, the rule of Rām, Heaven on Earth. As the Rām Charit Mānasa (20.1) succinctly states: Rām Rāj dukh kāhu na vyāpā—in the reign of Rām suffering belonged to no one. This describes God Consciousness, in which one enjoys perfection of the inner, unbounded Self, while living fullness in every aspect of outer life—the outer is glorious and the inner is infinite, pure Being (see Chapter I: [God Consciousness](#)).

### **The Last Test of Sītā: Unity Consciousness**

In her final test, Sītā—the embodiment of Mother Nature, Total Natural Law—was asked to prove her purity. After vowing that Rām was her total reality, she placed herself upon a celestial throne that appeared from within the earth and then descended, in this way displaying her infinite nature. In Sītā's descent into the earth we find the realization that everything physical is Sītā, everything material is just a pure expression of Natural Law. This is the reality of Unity Consciousness (see Chapter I: [Unity Consciousness](#)).

After Sītā had departed, Rām was alone, by himself, but everything about him was actually Sītā. Sītā's descent tells us that she is all that is physical. Even the physical body of Rām is to be seen in terms of Sītā. This is the complete unity of Rām and Sītā—she is not just a part of him, she is all that he is, and that is the expression of Unity Consciousness.

### **The Sons of Rām**

Rām's response was to send Sītā to the forest to live under Rishi Vālmīki's



protection. While staying at his *Āshram*, Sītā gave birth to Rām's twin sons, Kush and Lav. This is significant because they are Rām's sons: they spring from his energy and essentially are Rām. Yet because of the rumour there is separation—Rām was not present when his sons were born. It is as though *Prakṛiti* was not *Purusha*. This illusion is the reality of the limited perception of the collective consciousness of that society.

The events unfolding in this part of the Rāmāyaṇ take the evolutionary process from the level of individual consciousness, to the consideration of social development and evolution, and to the level of collective consciousness. There was a battle that ended in victory, and now there is another battle—to establish not only the individual on the highest level of consciousness but also society.

The crowd's belief that Sītā should separate herself from Rām was born of a collective illusion and ignorance. The fact that the crowd sees her as different from Rām is the actual illusion. The separation of Sītā from Rām is a separation only on the level of relative perception, the level of an ignorant, rumour-based reality. In essence there is no separation possible.

When Sītā returned to Rām and again proved her purity by going into the Earth, it was an affirmation of the purity of *Prakṛiti* and therefore the unity of *Prakṛiti* and *Purusha*. The response of the totality of Natural Law was that Sītā went back into the Earth and was again absorbed by Wholeness, in the same way that she was absorbed and yet untouched by the fire. In her desire to go back into the Earth, Sītā expressed that she indeed was Totality, she was Natural Law, she was *everything*. *Purusha* was on its own, as if the Self can be separate from *Prakṛiti*, but in reality they are always one. Her return to the Earth was a return to Wholeness, *Brahm*, Rām. In fact she was most unified with Rām through this apparent process of going away to the Earth. What was effaced was the collective perception that there are two different realities. This is collective liberation and enlightenment and the basis of a true *Sat-Yuga*. The story is an affirmation of the reality of Sītā and *Prakṛiti*,

which in essence is pure, absolute Being.

Later, when Rām's sons came to Ayodhyā, Rām recognized them as they recited the verses of Vālmīki's Rāmāyaṇ. This is a very profound, self-referral reality, which brings back the specific expression of the Absolute to Itself: *I am you, I know you, I tell your own story*. The expressions of the Absolute in the relative are the storytellers of the Absolute. All manifest expressions of life are just the story of the Absolute. Maharishi brought to light the beautiful understanding that every expression of the physical reality of life is itself Absolute.

To be able to experience the Absolute in the relative is the experience of the highest level of human development. When Rām sat to listen to his sons recite the Rāmāyaṇ, the Absolute was seen on the surface of life and the relative was perceived in its true nature as Absolute. Rām looked at his sons, and hearing the reverberations of the Rāmāyaṇ in their chanting he recognized them both as himself. The Absolute recognizes itself in the relative. This is Brahman Consciousness.

### ***Footnotes***

1. See Chapter VIII, [figure 8.5](#).

2. See [Chapter IX](#).

3. *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 99–110.

4. See Chapter XII, [Rām's Encounter with Virādha](#).

5. See Chapter XIV, [the immune system](#).

6. See Chapter I, [The Self-Interacting Dynamics of Consciousness—The Dynamics of Ātmā](#).



## Chapter XIX

### The Story of Hanumān

**H**anumān is one of the most important characters in the Rāmāyaṇ. In this chapter we will review events involving Hanumān, and summarize them in light of their significance in human physiology. We will also examine some diseases and abnormalities related to the parts of the body corresponding to Hanumān.

The *Bāl Kāṇḍ* reveals that many divine beings incarnated on Earth at the time of Rām's birth to assist him in destroying negativity and restoring balance. These incarnations of celestial beings depict the enlivenment of the total physiology and include heroes such as Hanumān, Jatāyu, Sugrīva, Vālī, and Jambavān. Hanumān's auspicious birth is described as follows:

मारुतस्यौरसः श्रीमान् हनूमान् नाम द्विघानरः  
द्विघज्रसंहननोपेतो द्विघैनतेयसमो जद्विघे  
सद्विघद्विघानरमुख्येषु बुद्धिमान् बलद्विघानपि

*Mārutasyaurasaḥ Shrīmān Hanūmān nāma vānaraḥ  
vajra-saṁhananopeto Vaitaneya-samo jave  
sarva-vānara-mukhyeshu buddhimān balavān api  
(Bāl Kāṇḍ, 17.16–17)*

*The glorious Vānara named Hanumān is the son of Mārut, the God of wind. He is endowed with a body as invincible as a thunderbolt, and is the equal of Garuda in speed. Among the Vānara chiefs he is the most intelligent as well as the most powerful.*

As the most powerful of all *Vānara*, Hanumān represents the holistic value of the hormonal system, functioning in harmony with the total value of Natural

Law. Not only do hormones function in tune with individual requirements, but they are governed by precise and specific cycles based on the cycles of nature. For example, in Chapter XIII we discussed the higher secretion of such hormones as cortisol and growth hormones in the early morning, as well as higher secretion of others, such as melatonin, during the night.

These cycles are sensitive to the greater cycle of the Earth revolving around its axis, the cycles of the Earth moving around the Sun, and the cycles of the Moon and the galactic universe. They can be properly understood through the science of Jyotish, which unfolds the all-knowing quality of the 40 aspects of Maharishi's Vedic Science and Technology.<sup>1</sup>

## **The Origins of Hanumān**

To understand Hanumān's nature, let us first consider a story appearing in the *Uttar Kāṇḍ* that displays his prowess. Hanumān's mother once went into the forest to find fruit for her hungry young son. Left on his own, Hanumān looked up at the Sun and mistook it for a piece of fruit. Taking vast leaps at an astonishing speed, Hanumān actually reached the Sun, and in his eagerness and voracity he terrified Rāhu,<sup>2</sup> who was also attempting to travel to the Sun.

Frightened and frustrated, Rāhu went to Indra, the king of the *Devatās*, to complain that this was his appointed time to be at the Sun, but that some other being had interrupted him. Indra was concerned and went to the Sun to investigate, bringing Rāhu with him. Hanumān saw Rāhu approaching, and in his great hunger mistook Rāhu for another piece of fruit and rushed towards him. Rāhu was terrified, and in order to protect him Indra threw his thunderbolt at Hanumān, striking him on the cheek.

Hanumān fell to the ground unconscious, and his father Vāyu, the *Devatā* of the wind, came to his rescue. Vāyu was incensed with Indra for striking his son, and withdrew his quality of movement from all living beings. Feeling suffocated along with other afflictions, the *Gandharvas*, *Devatās*, *Rākshasas*,

and celestial beings implored Brahmā to force Vāyu to return movement to their bodies.

Brahmā went immediately to the unconscious Hanumān, and with one touch brought him back to life. Vāyu then began to circulate again, to the relief of the *Gandharvas* and other beings. To further appease Vāyu, Brahmā asked Indra, Agni, Varuṇa, Shiva, and other *Devatās* to grant boons to Hanumān. In this way Hanumān gained enormous strength and knowledge.

The story continues with Hanumān's childhood, during which he created mischief in the *Āshram* of eminent *Ṛishis*, due to his growing confidence in his new powers. He eventually caused so much trouble that the *Ṛishis* cursed him to remain unaware of his full power until later in life. As a result of this curse, Hanumān grew up among the *Vānara*, unconscious of his full strength and abilities. Even when hostility broke out between Sugrīva and Vālī, Hanumān did not attack Vālī, because he was unaware of his own great power. Only when he surrendered to Rām, the embodiment of Wholeness, did he realize his full might.

Hanumān's story corresponds to developmental processes that take place before and after birth. During its early stages, an embryo's physiological cycles, nutrition, the oxygenation of the blood, and metabolism are controlled by its mother's hormones and cycles. At birth, sensory information floods the infant's body, and at this time the individual's hormonal cycles and hypothalamic activity begin to function separately from its mother.

This is parallel to the events of the story of Hanumān. Just after he was born his mother went to get him fruit. She had been naturally providing his sustenance on the basis of her rhythms of feeding, but at this point Hanumān needed to follow his own cycles and needs. No longer in the womb, it was time for him to begin setting his own rhythms, determined by the cycles of day and night as well as by the planetary cycles that were relevant to his own specific individuality, as described in Jyotish.

Everyone, not only a newborn, is subject to effects from planetary influences and cycles, which are channelled through the sensory systems. Virtually all neurophysiological inputs to the body are relayed via the thalamus, which corresponds to the Sun, or Sūrya. The description of Hanumān jumping up to the Sun depicts his reach towards the thalamus, the master switchboard of sensory perception. While Hanumān's leap towards the Sun represents a natural transition in the development, this new independence must be integrated with the functioning of the entire physiology.

## **The Blood-Brain Barrier**

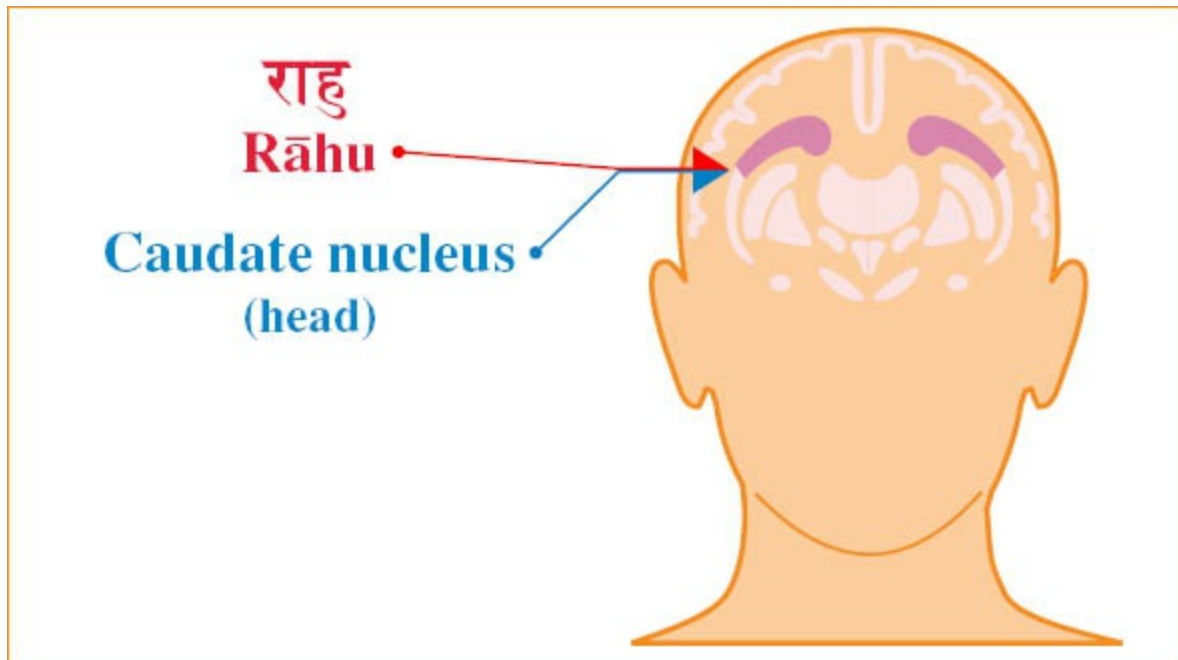
There is a stage of development in which the inner environment of the brain requires protection from moment-to-moment changes in the concentrations of hormones, proteins, and amino acids in the circulation. It is at this point that the blood-brain barrier is created between the circulatory system and the brain, corresponding to Indra's enforced separation of Hanumān from the central activity of the brain.

Hanumān's reach toward the Sun indicates an early phase of physiological development in which hormones directly influence the growth, development, and organization between different parts of the nervous system. Only later, when the central nervous system is fully developed, does it become shielded by the blood-brain barrier, at which time hormones send information indirectly to the nervous system.

In this story, Indra—corresponding to the mind, whose intentions are carried out through the physical structures of the central nervous system—protected the Sun and Rāhu from Hanumān, who represents the hormones and messengers. The hormonal system is extremely powerful, especially during its developmental period, and if it loses its state of balance the outcome of connections between parts of the brain can become altered. Indra's action thus depicts the establishment of a specific relationship between the



hormonal system and the central nervous system.



**Figure 19.1 Rāhu, the ascending lunar node, corresponds to the head of the caudate nucleus.**

Rāhu corresponds to the head of the caudate nucleus, located within the basal ganglia.<sup>3</sup> The basal ganglia are intimately connected to the thalamus and are important for movement and the expression of emotions and cognitive behaviour. Hanumān's leap to the Sun represents the creation of the connection between the hormonal system and sensory perception.

This element of the story reflects an important principle in the neurophysiological functioning of the hormonal system and the neurohormonal axis. The blood-brain barrier is a highly selective structure of tissue that surrounds the blood vessels of the central nervous system, but which allows oxygen, carbon dioxide, glucose, and smaller ions to freely penetrate from fluids in the vessels of both the arterial and venous systems into the nervous system. Lipid soluble molecules can also pass through the membrane barriers, but most large molecules, such as proteins and hormones, are not allowed to freely penetrate the blood-brain barrier. There is an active

transport mechanism that permits certain large molecules to enter the brain, but it is highly selective and controlled. For example, amino acids and other molecules necessary for brain function are transported only as needed by the brain (see [figure 6.5](#)).

Whenever we eat or experience change in our inner or outer environment (such as changes in temperature or in metabolic processes), many factors must be modified in the blood. The concentrations of various factors, such as blood sugar, amino acids, hormones, etc., can influence physiological processes in the organs and systems of the body, including the hormonal glands. These influences lead to the secretion of hormones and changes in numerous factors and cofactors, constantly adjusting and readjusting the level of physiological activity to ensure that the body functions properly at all times.

If these changing concentrations of factors in the blood system were experienced directly by the central nervous system, an unstable situation would result, such as swings in mood and emotions. This would be destructive to the integrity of the nervous system. The central nervous system is able to detect and recognize changes in the body through an intricate process of analysis and synthesis, which neither upsets its holistic integrity nor the long-term cycles and requirements of the physiology.

There are tiny areas in the brain called the circumventricular organs, which are free from the blood-brain barrier, and these sense information about any change that takes place in the circulating hormones and body fluids. One of these areas, called the median eminence, enables the hypothalamus to assess certain hormone levels. The hypothalamus corresponds to the Moon, so the hormones it detects must also be connected to the Moon. They are, however, shielded from the Sun, the thalamus, which represents the centre of activity of sensory inputs of the nervous system.

Indra's thunderbolt knocked Hanumān away from the Sun and Rāhu, just as the central parts of the nervous system are protected from changes in

peripheral messengers. This does not mean, however, that the central nervous system is oblivious to what is taking place with regard to the activities of the hormones and metabolic activities. The central nervous system is continuously analysing and adjusting everything that is taking place in the body, including the activities of the hormones and the autonomic nervous system. This process of analysing and adjusting is achieved holistically by the central nervous system, which detects what is occurring, analyses it, and then decides on the physiology's requirements.

When the body begins to experience a reduction in nutrients, such as reduced sugar in the blood, corresponding changes will occur in the level of some of the hormones in the blood, such as glucagon and insulin, depending upon the blood glucose levels. At this point many changes and adjustments of hormones and metabolic processes take place in order to maintain homeostasis. The central nervous system, however, does not need to act on every piece of information, as many adjustments are performed by the endocrine system or by local cellular mechanisms.

For example, as we begin to digest and then metabolise a meal, the levels of nutrients in the blood and in the rest of the body are gradually reduced. This reduction is adjusted automatically by the hormonal system and the autonomic nervous system, in order to maintain enough sugar and amino acids circulating in the blood so that the cells are able to perform their functions. The central nervous system maintains its holistic vision while these adjustments are taking place, and when the stores have been sufficiently depleted we begin to feel hungry again. At this point—taking many variables into consideration, such as the time of day as well as social and environmental requirements—the central nervous system makes the decision that the optimum action is to eat again. This holistic experience involves the mind and thought processes, and the distillation of information regarding conditions and requirements. The mind is then able to act and initiate behaviour that will benefit the whole physiology.

Another example will help clarify this point. We might become hungry at a moment when it is impractical or not possible to eat, such as a social situation or during an important conversation. Fortunately the central nervous system not only takes into consideration the needs of the body, but also has the ability to distil, synthesize, and make use of information regarding environmental needs. This is the reason that the hormonal system is not directly connected to the sensory systems nor to the thalamus. Hanumān should only respond and be directly connected to Rām in order to take advantage of the most comprehensive vision.

When Hanumān leapt for the Sun he was not merely trying to satisfy his hunger, but also to indirectly inform the Sun of his needs. This bidirectional relationship, however, is not permitted on a direct level, which explains why Indra—the mind—interceded. Even though the thalamus can be informed indirectly as to what is taking place with respect to the hormonal and messenger levels, this information must first be integrated. Hanumān (the hormonal system) must sit at a distance from the Sun (the thalamus). The information that Hanumān will give to or take from the Sun, the centre of sensory experience and sensory processing systems in the brain, must be given or taken holistically.

### **Specific Versus Holistic Perception**

The protective mechanisms related to the blood-brain barrier ensure that we experience both the specific and the holistic aspects of any object of perception. We have seen how the central nervous system takes into consideration individual requirements of the body as well as the requirements of the environment. Let us now consider another example of how we experience both the specific as well as the holistic.

When we look at any object it is first detected by the cells in the retina. The neural excitations from the retina are then analysed, synthesized, and processed by various brain centres. Once an image is formed it is compared with memories and emotions, and is interpreted and formulated as a particular

thought about the object under consideration. The thought, which comes from an observation, is therefore an integrated, holistic experience.

There is a vast difference between the experience of specificity and the experience of wholeness. If the brain were allowed to become excited by every input of light independently, there would be no wholeness of experience, and our level of activity and behaviour would be totally disorganized. In order to function in the world we need to have holistic perception, which can have different levels of wholeness. For example, there is the wholeness of the fibre of a petal, the wholeness of many petals together forming a flower, the wholeness of a collection of flowers comprising a garden, the wholeness of gardens and houses and roads that form a city, and the wholeness of a nation, a world, or a universe. The ability to perceive wholeness from the largest possible perspective ultimately leads to the ability to perceive every aspect of the universe in terms of Unity—the unified wholeness of pure existence, pure Being.

Specificity is one aspect of reality, a part of a holistic reality, which includes other specific values. Any specificity by itself has its origin in the Unified Field of Natural Law—indeed every atom, every particle, every object of the universe is essentially the Unified Field. Wholeness can therefore be experienced from two different perspectives: first through outer expansion, which takes one specific aspect of reality and puts it together with other specific aspects, and then by synthesizing them into a greater wholeness. As this wholeness expands to include the entire universe, it reaches holistic totality. The second perspective is the inner direction of self-referral reality, in which we look at the origin and essence of every specific value and find that it is the Unified Field of Natural Law.

These two perspectives of experience are the outer and inner aspects of the realization of the wholeness of Natural Law. We find wholeness going within to that which is smaller than the smallest, and we also find wholeness going out to experience that which is larger than the largest. This is beautifully

expressed in the Upanishad, the branch of the Vedic Literature that unfolds the Transcending quality of consciousness:<sup>4</sup>

अणोरणीयान् महतो महीयान्

*Aṇoraṇīyān Mahato-Mahīyān*  
(Katha Upanishad, 1.2.20)

*(The Self is) finer than the finest, bigger  
than the biggest*

The relationship between specificity and wholeness can be found on all levels of physiological and behavioural activity. We have seen that the central nervous system is able to detect specific changes of hormonal concentration in the blood, yet its holistic integrity is not overwhelmed by the specifics. This is the reason that Indra kept Hanumān (the hormonal system) at a distance.

Our ability to assess the holistic grows with the evolution and development of the central nervous system. This applies phylogenetically, looking from lower to higher species, and it applies to the growth of every individual towards higher states of consciousness.

Experience can be misleading if the specific is not seen in the context of holistic perception. This same principle can be illustrated through the mechanics of the fight-or-flight response, which directly involves the hormonal and autonomic nervous systems. When we are exposed to a frightening situation, such as the sudden appearance of a tiger, our brain decides whether or not the situation is dangerous, and if so it activates mechanisms inside the physiology to protect and prepare the system for facing the danger through fighting or through running away.

The fight-or-flight response is an internal integrated mechanism involving many physiological changes: hormones are secreted, transmitters are



activated, blood pressure increases, blood flow is appropriated from the internal organs to the muscles, the eyes dilate due to the increased sympathetic input, and the metabolic processes send energy to the muscles.

Suppose, however, that we realize that the tiger is made of paper and that there is nothing to fear. Such a tiger might even make us smile and relax. Sensory perception is integrated in the brain and out of this integrated perception comes an acknowledgement of the reality, which is then transmitted to the physiology, including the hormones and the entire autonomic nervous system. Our reaction might very well be one of laughter and relaxation rather than of tension, with a reduction in blood pressure rather than an increase. Clearly we would react quite differently depending upon how the information coming to the brain is interpreted.

It is very important for our safety, health, and progress in life that sensory input is accurately interpreted and properly integrated. The most appropriate reaction will then take place automatically, and the physiology will adjust to the requirements. This is why the autonomic nervous system and the neuroendocrine system are not directly connected to sensory perception. When Indra struck Hanumān, it represented a further stage of development in which the mind protects the brain from the power of fluctuating hormones. It is necessary for the mind to protect the brain so that the overall interpretation of any situation is holistic. With the full development of the brain, every situation can be seen in its most holistic reality—from the state of Unity Consciousness, in which every experience is in terms of the whole.

## The Pacification of Vāyu and Hanumān's Boons

When Indra's thunderbolt struck Hanumān, it rendered him unconscious, angering his father Vāyu who immediately stopped the movement of breath everywhere in creation. This corresponds to the moment of birth, right before a newborn takes its first breath. When Vāyu restricted the breath, the *Gandharvas* as well as all living beings were greatly distressed. The *Gandharvas* correspond to the autonomic ganglia located around the heart.<sup>5</sup> When Brahmā touched Hanumān, Vāyu was pacified, respiration was restored, and movement within the body began again. This touch corresponds to the exact moment when a baby's lungs first expand and air begins to flow into the physiology.

The *Gandharvas* and other beings were immediately relieved and again in bliss. The hormonal system and autonomic nervous system have begun to function independently. This was followed by Brahmā's request to the *Devatās* to grant many boons to Hanumān. These boons correspond to all the potential powers encompassed by the hormonal system, and to the awakening of the physiology, including the development of the brain where the *Devatās* reside. It is significant that early brain development is extremely sensitive to, and dependent upon, hormones.

The *Rishis* cursed Hanumān so that he would not realize his power until he was mature, which corresponds to the hormonal system not realizing its full strength until it has undergone all the stages of its development, including puberty. Once the hormonal system has fulfilled its role in the growth and development of the body, it is able to participate in the administration of the physiology through the utilization of its own potential. When Hanumān fully surrendered to Rām, he realized his full potential and was easily able to move through the air to Lankā and confront Rāvaṇ. He became a remarkably powerful force in restoring order and balance, and a vital and central part of the battle, at one point saving Rām, Lakshmaṇ, and the entire army.

All of the messengers function automatically within the physiology and are always in tune with wholeness, with Rām. Hanumān, however, also has a special relationship with Lord Shiva. Shiva is infinite silence, completely holistic in his essential nature, while Rām is the incarnation of Vishṇu, who is infinite dynamism. With Rām in his heart, Hanumān represents Shiva, total silence. Hanumān's role was to maintain silence within himself and act in accord with Wholeness. All of his abilities were due to his deep connection to Rām, for Rām sits eternally in his heart.

The essence of Hanumān is pure silence, which is dynamic by virtue of Rām's presence within him. This is how silence takes on dynamism and produces Wholeness and harmony in the field of change and diversity. The hormones are catalysts of metabolic transformations, which carry messages and allow actions to take place.<sup>6</sup> This is the quality of dynamism in silence and silence in dynamism.

Hanumān is the supreme messenger. His qualities are beautifully delineated in the Rāmāyaṇ and inspire every reader towards thought and action in the direction of enlightenment. The master of all the *Vānara*, Hanumān represents the perfectly balanced surrender of the physiology to holistic functioning, which enables the great success of the hormonal system. This is why Hanumān's feats have been renowned throughout the ages.

Hanumān was also Rām's greatest devotee, which means that he was directly connected with Rām, and thus completely open to higher, enlightened brain activity. This includes the *Devatā* areas of the brain, and especially the somato-sensory and supplementary motor cortex. It is this eternal, continuous connection with Rām, with Wholeness, that we call devotion.

### **Hanumān's First Meeting With Rām**

Hanumān first appears in the *Kishkindhā Kāṇḍ* during Rām's search for Sītā. Recognizing Rām instantly, Hanumān immediately became his disciple. Hanumān was a minister of Sugrīva and was hiding with him in the forest

when Rām and Lakshmaṇ first arrived in Kishkindhā. This corresponds to the total inhibition of hormonal activity that takes place when the pituitary gland is not functioning properly due to physiological abnormality or disease.

Sugrīva was the *Vānara* king. He corresponds to the anterior section of the pituitary gland, the master gland of the endocrine system. The pituitary gland is connected to the brain through a stalk that ultimately connects it to the hypothalamus, corresponding to Chandra, the Moon, which represents the holistic values of expansion and transformation. The pituitary stalk and the posterior pituitary gland correspond to Vālī, and the relationship of the stalk to the pituitary gland mirrors the relationship between Vālī and his brother Sugrīva. At the time of Rām's arrival, Hanumān was responding to Sugrīva's orders, and Sugrīva was responding to the conflict with his brother.

Since Hanumān and Sugrīva were hiding in the forest and had not yet connected to Rām, we can think of them as hiding from Wholeness. When Rām appeared, Hanumān's power unfolded and Sugrīva fulfilled his duties and functions. Without Rām there was conflict due to their emphasis on specificity, which views itself as separate from the wholeness of Rām, the totality of *Brahm*. If the pituitary gland is not connected with the total functioning of the physiology and brain, it will be unable to function normally.

The pituitary gland's inability to function properly influenced Hanumān's activities. He was a faithful *Vānara* who followed the tradition of his king, and therefore when Sugrīva went into hiding he accompanied him. But Hanumān is the holistic value of the hormones and their activity, and when wholeness is hidden, several different types of physiological problems arise in the pituitary and hormonal system.

## **Diseases of the Pituitary Gland**

We will now consider some of the diseases related to the pituitary gland.

The pituitary gland has wide control over the other glands and hormones of the endocrine system. For example, it controls the thyroid gland, which helps regulate metabolism, and controls hormones that influence the growth of muscles, bones, and different tissues. It also controls the hormones that are related to blood pressure, kidney function, and water balance, as well as the regulation of the release of certain hormones during stress, which have a profound influence on the immune system.

There is a hierarchy in the endocrine system, beginning with the pituitary gland, the king of hormones, followed by his generals, the glands, and then the army, which are the different hormones. Within this hierarchy the pituitary gland secretes a specific type of hormone that controls the secretion of other glands. After being stimulated by the pituitary hormones a gland then secretes its own hormones, which act on the cellular level in the tissues and organs. Included in this hierarchical structure are feedback loops that keep the higher levels informed about what is taking place on the lower levels. Above the endocrine system there are still higher levels of control in the hypothalamus and brain. In this way the highest level, in which Rām is located, is always aware of what is happening throughout the body.

Problems in the pituitary gland can either be specific isolated deficiencies or can be more generalized. Some generalized problems are due to tumours, either in the pituitary gland or the hypothalamus. For example, there are pituitary adenomas, or tumours, as well as several types of hypothalamic tumours, such as craniopharyngiomas, germinomas, chordomas, meningiomas, and gliomas.

Another generalized problem is pituitary inflammatory disease, which refers to a reaction of the immune system that results in an increase in blood flow and in the number of immune cells in the pituitary gland. In a healthy person, inflammation is a natural and important part of eliminating foreign invaders, such as viruses, bacteria, or other harmful anomalies. However, there are abnormal states, such as autoimmune diseases, in which the cells of the body

do not properly distinguish between what is ‘self’ and what is ‘non-self’, and begin attacking normal cells of the body.

Inflammation can be either acute or chronic. Chronic inflammation can arise from viral or microbial infection, prolonged exposure to toxic agents, or autoimmune disease. Granulomas are seen in diseases such as sarcoidosis, tuberculosis, syphilis, and granulomatous hypophysitis. Hypophysitis refers specifically to an inflammation of the hypophysis (another name for the pituitary gland). There are different types of granulomas depending on the disease and the types of cells involved in the inflammatory response, such as eosinophilic granulomas, which contain a type of white blood cell called eosinophils.

Other complications in the pituitary include vascular diseases, due to problems of the blood vessels. The vessels that surround and nourish the pituitary area may become inflamed and even obliterate. If this occurs, the pituitary does not receive nourishment from the blood and is therefore not able to function.

There are three general categories of vascular disease that lead to necrosis (tissue death). One is Sheehan’s postpartum necrosis, which takes place after giving birth as a result of necrosis of the blood vessels. A second type is diabetically related peripartum necrosis, and the third type is due to a specific kind of aneurysm in the carotid artery. The carotid artery supplies blood to the pituitary area, and if an aneurysm—a localized, blood-filled dilation—forms, blood can be shunted away or the vessel itself may burst, leading to bleeding and further complications. This sort of complication in the blood supply usually leads to hypopituitarism, in which the activity of the pituitary gland is reduced.

Any disease that results in a reduced pituitary function is included under the general category of hypopituitarism. Hypopituitarism corresponds to Sugrīva and Hanumān hiding in the forest in anticipation of a battle between Vālī and Sugrīva. Vālī had shunted some of the blood vessels away from Sugrīva,



which corresponds to the actions of Tārā, the *Patnī* of both Vālī and Sugrīva at different times.

The fifth general category of problem is accidental or destructive, in which there is a traumatic injury to the pituitary gland (called ‘destructive-traumatic events’). In modern medicine this includes several types of disease as well as surgical errors, such as a surgeon accidentally cutting the supply of blood to the pituitary gland, slicing into the pituitary stalk, or directly injuring the pituitary gland. There can also be excessive bleeding and inflammation as a result of the surgical removal of a tumour or the gland itself. All of these conditions can lead to hypopituitarism.

Another type of accidental or destructive problem resulting in hypopituitarism is radiation damage to the pituitary gland that occurs in individuals undergoing radiation therapy for a tumour in the pituitary or the hypothalamus. An additional destructive event is an accident, such as a head injury occurring during a car accident or a fall, which may result in trauma that causes difficulties in the pituitary gland, leading to hypopituitarism.

Other problems include a disruption in the proper sequence of growth, resulting in structural and functional difficulties. One example is pituitary aplasia (aplasia means ‘lack of growth’ or ‘lack of proper development’). Proper growth may also be disrupted by cysts pressing on the pituitary. A basal encephalocoele is a herniated sac that usually occurs during early stages of development, potentially leading to aplasia.

Another set of complications may arise from the infiltration of the pituitary from other tissues in the area. In a condition called hemochromatosis, excess absorption of dietary iron is deposited within the cells of the pituitary gland, disrupting normal tissue and organ functioning. A condition called amyloidosis occurs when amyloid, an insoluble fibrous protein, aggregates and infiltrates the pituitary gland, causing varying degrees of dysfunction.

Some of these conditions are not yet well understood, and are thus referred to

as ‘idiopathic’, meaning that the cause is unknown. Idiopathic types of pituitary problems are often thought to be caused by autoimmune problems.

These are all situations in which the pituitary is out of touch with the holistic functioning of the physiology, and correspond to Sugrīva’s conflict with his brother Vālī. One element of their conflict was that Sugrīva was virtually cut off from his brother, which corresponds to a traumatic cut or injury to the pituitary stalk. Sugrīva was not receiving support from his family, which could indicate a type of vascular problem. When the story first moves to Kishkindhā, Sugrīva was hiding in the forest, feeling traumatized and unhappy, which correlates with the condition of general hypopituitary functioning.

Before meeting Rām, Hanumān corresponds to a hormonal system that is not yet properly connected to the higher areas of the brain. Rām, as we know, corresponds to the higher cortical areas, particularly the supplementary motor cortex, which exert a controlling, alerting, adjusting, and balancing influence upon the physiology. When the hormonal system is not properly connected to the higher areas of the brain, then hormonal activity is also abnormal, causing various types of imbalances.

We will discuss later imbalances that relate to difficulties in Hanumān’s control of the activities of the pituitary gland, such as the improper secretion of specific hormones. It should be understood, however, that ultimately Hanumān’s master controller was Rām, not Sugrīva, even though he answered to Sugrīva as part of his chain of command. It is the totality of wholeness of physiological functioning that controls pituitary function.

Sugrīva was inspired, controlled, and guided by Rām, and in turn he guided and controlled Hanumān. In fact, there is a direct neuronal connection between these higher parts and the thalamus and hypothalamus, and subsequently a further connection to the pituitary gland, clearly indicating that on the physiological level the supreme control of Hanumān’s activity lies in Rām’s domain.

Therefore, even though Hanumān was under the authority of his own king when he first met Rām, his supreme and true Lord was Rām. When higher cortical control of the physiology associated with Rām is not available, a state of imbalance exists that results in many of the disease conditions we have discussed.

## **Hanumān Is the Holistic Value of Natural Law**

When Rām and Hanumān met, order and balance was established in the part of the physiology that had been previously disrupted by the enmity between Sugrīva and Vālī. Sugrīva was always taken into consideration, which means that Sugrīva himself was eventually involved in instructing and sending the *Vānara* (messengers) to find Sītā.

At one point in the story, Sugrīva, having reclaimed the throne, became distracted and delayed in the search for Sītā. Rām then needed to activate him, and sent Hanumān to respectfully remind him of his obligation to begin the search. Hanumān knew that his ultimate ruler was Rām, but he also answered directly to Sugrīva. This is the proper chain of command and it is physiologically significant. To maintain balance and order, channels and procedures are utilized according to a well-organized hierarchy. Hanumān's reminder to Sugrīva represents feedback from the hormonal system to the pituitary gland, inciting or inspiring it to respond appropriately to the requirements of the physiology.

This can be seen in ancient cultures and traditions throughout the world that possess the knowledge of how to create and maintain an ideal society. There is a hierarchical structure to these societies. These include specific traditions such as respecting and following the guidance of enlightened elders, who are the representatives of these traditions as well as channels for the flow of knowledge, and who are guided by the holistic value of Natural Law.

Hanumān was continually given highly significant missions to fulfil throughout the Rāmāyaṇ: he flew to Lankā, surmounting a number of

difficulties before identifying Sītā, and then informed Rām of her location; he also played a vital role in the battle, destroying countless *Rākshasas*; he brought herbs to revive Rām and Lakshmaṇ by transporting an entire Himālayan mountain covered with the necessary healing herbs, to ensure proper treatment.<sup>7</sup> From every angle Hanumān brought the fullness of all possibilities.



**Figure 19.2 Hanumān brings an entire Himālayan mountain covered with healing herbs.**

If Hanumān had not been available to bring the herbs to awaken Rām and Lakshmaṇ, someone else might have accomplished the feat, but that individual would have been as great as Hanumān himself—the holistic value

of Natural Law. Wholeness manifests itself in the beautiful characteristics and functions of Hanumān, and in the roles he played in the Rāmāyaṇ, and these we find corresponding to the hormonal system, nourishing every aspect of human development. The central nervous system controls the activities of the body through the neurons, while the endocrine system controls the different functions of the body through the hormones. Hanumān's value is indeed immense.

## **Feedback Systems of the Endocrine System**

Modern medicine has studied the homeostasis feedback systems in the hormonal system in great detail. Researchers have found that if a gland of the endocrine system begins to secrete excess quantities of hormones, this information is immediately relayed to the pituitary gland or hypothalamus, where steps are taken to reduce the secretion. This adjustment must be made on a moment-to-moment basis, similar to the automatic temperature control feedback systems that indicate when the body must increase or reduce heat production to counterbalance an outer rise or drop in temperature.

Feedback systems are an integral part of many physiological systems. Rām established a goal and asked Sugrīva to search for Sītā, but because of the monsoons Sugrīva did not act immediately upon this request. Hanumān then pointed out to Sugrīva that the time was at hand. In the physiology, the brain gives instructions to the pituitary gland to perform certain functions. The pituitary gland then monitors the physiology, and at the appropriate time receives a message from the periphery telling it that it must respond.

When Hanumān reminded Sugrīva, Sugrīva responded by sending his general Nīla to call and assemble all the *Vānara*. This represents a call by the pituitary gland for a holistic response from all of the circulating hormones. In order for the pituitary gland, Sugrīva, to give a full response, a certain level of feedback via the hormone system must occur first, so that the pituitary can release the correct amount of activating hormones.



Feedback is necessary because the pituitary must recognize the degree to which it ought to respond, as well as the most appropriate time to carry out an action. In the Rāmāyaṇ the issue of timing is brought out when Rām asked Lakshmaṇ to check again with Sugrīva and enquire as to the cause of the delay—another reminder from the nervous system to the pituitary gland.

Delays often occur for specific reasons, and again timing is critical. There is always feedback, a self-referral process of adjustment—there is an action and a reaction, an observation of the situation and a decision to respond. The body’s strategy is to check and double-check from different perspectives to make sure that everything is functioning in accord with Natural Law.

It is for this reason that recitation of the Veda must be performed in a highly precise and exact manner according to the Vedic Tradition, which means in accord with the Laws of Nature. The Laws of Nature are perfect and must be followed in a specific sequence and order. Maharishi has explained these mechanisms of feedback—the mechanisms of going back to the Self—and his *Apaurusheya Bhāshya* reveals the cycles. The 10 *Maṇḍals* of Ṛk Veda<sup>8</sup> form these cycles, rotating back onto themselves. We see this in the First *Maṇḍala* and in the Tenth *Maṇḍala*, which is within the First *Maṇḍala*.<sup>9</sup> Each step of going forward is followed by a step going back to the Self, so that each step of expansion is always in the proper evolutionary direction based on feedback—based on going back to the Self. This is the great beauty of Natural Law, which manifests itself in all aspects of creation.

When we consider Sugrīva’s delay in beginning the search for Sītā, it is easy to sympathize with Rām and wonder why Sugrīva did not immediately obey. And we can understand why Lakshmaṇ became angry and tried to force Sugrīva to begin the search. But now we also understand that the delay represents an aspect of the feedback loops of the system, the mechanics of Natural Law that ensure that activity is always moving in the proper direction.

Sugrīva feared Lakshmaṇ’s wrath, and thus Hanumān urged him to



immediately submit to Lakshmaṇ. The combination of Hanumān's advice, Lakshmaṇ's presence, and the arrival of the appropriate time awakened Sugrīva to his responsibilities—the pituitary gland awakens as a result of receiving input from the periphery, represented by all the *Vānara* but mainly by Hanumān, and from the central nervous system, represented by Rām's messenger, Lakshmaṇ.

Hanumān represents the holistic value of Natural Law, and only Wholeness can assure Sītā's return—only the holistic value can recognize that Sītā is Rām. *Prakṛiti* might appear to be different from silent *Purusha*, but Hanumān embodies the holistic value, which connects the specific with the holistic—which makes sure that *Prakṛiti* and *Purusha* are together. Again, it is a question of perception, and the illusion that any part is different or separate from Wholeness only results in problems and difficulties.

The hormones that circulate throughout the body pass through very tiny places, and possess an integrating and reassembling quality. These qualities are similar to the qualities of *Soma* and *Ojas*, described in Āyur-Vedic texts as the most refined and subtle substances in the physiology, which maintain the unified functioning of the hormonal system. Hanumān, the hormone system, overcame the illusion of the separation between the physiology's holistic planning and its differentiated activities—*Purusha* and *Prakṛiti*—by acting as the 'glue' of the universe of the body. Hanumān makes sure that *Prakṛiti* and *Purusha* are recognized as being together. This is the correct perception of their reality—togetherness.

### **Balanced and Unbalanced Functioning of the Immune System and Disorders of the Endocrine Glands**

We saw also in Chapter XIII that Rām gave Hanumān a ring to present to Sītā, so that she would feel confident that he was truly Rām's messenger.<sup>10</sup> The issue is not trust, the story simply displays physiological mechanisms that ensure that Wholeness is maintained in every part of life.

A ring is a three-dimensional structure that represents a three-dimensional protein marker on the surface of a cell. It has a specific quality that allows it to be recognized in the physiology as either ‘self’ or ‘non-self’. When Hanumān came to Sītā with the identifying physiological structure, it allowed her to understand that the message was from total Natural Law.

This is an example of the physiology’s ability to recognize both ‘self’ and ‘non-self’. The body is constantly clearing itself of foreign materials, such as bacteria and viruses from the air we breathe, bacteria from the food we eat, etc. Even if we follow the most pure and nutritious diet, living a life of antiseptic cleanliness with perfect elimination, the body is still inevitably full of bacteria. Normally bacteria live inside us in a state of symbiotic peace with the physiology, with infectious diseases arising only when harmful bacteria enter the body and disturb its functioning.

Normal cells becoming cancer cells correspond to the formation of a *Rākshasa*. These anomalies must be put in their proper place, in proper order, at the proper time. The immune surveillance system is constantly alert to identify every cell as either ‘self’ or ‘non-self’, and if a cell has a marker denoting ‘self’, it leaves the cell alone. But if it does not bear this marker, the immune system will try to destroy it.

There are many different diseases related to improper functioning of the immune system, and these correspond to aspects of the story in which a message or messenger from Rām was not properly recognized. Some of these diseases are classified as primary immunodeficiencies, problems that are primarily due to a deficiency in the immune surveillance system.

We can divide primary immunodeficiencies into several general categories, such as combined immunodeficiencies, antibody deficiencies, and well-defined immunodeficiency syndromes. Some problems are caused by the deficiency of a specific necessary metabolic product. It is as if Rām’s ring were cracked or incomplete, or even the wrong ring. In such a case Sītā would not recognize it, which means that the body would see it as ‘non-self’

rather than ‘self’.

Antibody deficiencies are immunodeficiencies. Antibodies are specific types of molecules that mark foreign invaders so that they can be attacked by other parts of the immune system. There are several general types of antibodies, each of which can have deficiencies within them. The medical curriculum of Maharishi’s College of Perfect Health will examine these disorders and relate them to the details of the Rāmāyaṇ.

One of Hanumān’s most extraordinary feats was his flight through the air to Lankā, which we reviewed in detail in Chapter XIII.<sup>11</sup> In order to fulfil his desire to cross the ocean, Hanumān held Rām in his heart—he returned to the Self again and again—in order to practise Yogic Flying. This is exactly how the hormonal system functions: it engages in a specific activity, but always with reference to the holistic requirements of the physiology.



**Figure 19.3 Hanumān crosses the ocean from India to Lankā.**

When Hanumān finally departed from Lankā, he leaped from house to house setting the city on fire as he went. Hanumān in this context represents all the messengers in the body that activate the power of the immune system to ‘burn up’ and destroy cancerous, or foreign, cells. Among the most important of these immune activators are the interleukins that strengthen the immune cells in their attack on bacteria, viruses, and cancer cells.

We can also interpret Hanumān’s destruction of Lankā as the activities of the thyroid hormone increasing metabolism in an area. Thyroid hormones play an important role in regulating metabolism, and a disruption in their functioning

can have serious consequences for health. Two main thyroid diseases are: hypothyroidism, which refers to insufficient production of the thyroid hormone by the thyroid gland, and hyperthyroidism, which refers to the overproduction of circulating free thyroid hormones. Symptoms of hypothyroidism are excessive weight gain, sluggishness, slowness in mental activity, and depression. There are various symptoms of hyperthyroidism, such as hyperreflexia, emaciation, nervousness, and anxiety. Hanumān's burning of Lankā (and to a lesser extent the descriptions of the *Vānara* lighting fires to keep themselves warm) corresponds to an increase in metabolism as a result of an increased secretion of thyroid hormones. If the fire were to become too great, the situation would then correspond to hyperthyroidism, in which the cells metabolize excessively.

Diseases of the thyroid can either be due to the thyroid itself or to problems at higher levels, in the pituitary or hypothalamus. An example is the inability of the pituitary to produce sufficient thyroid stimulating hormones to activate the thyroid gland. This corresponds to either a lack of communication between Sugrīva and his army, or some sickness within Sugrīva. The inactivity of the *Vānara* is due to their leader, the pituitary gland. This problem can also occur if the hypothalamus does not send enough thyrotropin-releasing hormones to activate the pituitary gland. If wholeness, Rām, is not connected to the pituitary gland, then Sugrīva will encounter difficulties.

Let us now focus on some of the events in the final battle between Rām and Rāvaṇ that relate to Hanumān and the endocrine system.

In Chapter XVI, we discussed Hanumān's flight to the Himālayas to bring herbs to Rām, Lakshmaṇ, and the *Vānara* army. We recall that the herbs were able to cure everyone except the *Rākshasas*, because they had already been removed by Rāvaṇ and were therefore not available to the healing process—these particular destructive physiological anomalies were already being processed for elimination by one of the detoxification systems.<sup>12</sup>

As we know, the body has many mechanisms for cleaning and detoxification, some of which involve hormones. The hormones participate in the activation of the immune system, which leads to the cleansing of toxic waste from the physiology, and Hanumān's activities in this story represent the healing process.

Let us look in greater detail at the specific hormones involved in both healing the body and in reviving consciousness. One of the main hormonal systems for healing is the adrenocorticotrophic hormonal secretion system, which causes the secretion of cortisol in the body. Cortisol acts as a powerful biochemical in the healing process because it quiets down the immune system, and leads to the secretion of adrenaline, which specifically increases heartbeat and blood flow.

Adrenaline is often used to revive someone who has become unconscious from an accident or cardiac arrest. Adrenaline is also produced and secreted naturally from the adrenal glands, and is therefore part of the hormonal system's holistic activity. The secretion of adrenaline and cortisol corresponds to Hanumān bringing the mountain of herbs from the Himālayas. Even an unconscious brain can be reactivated through these hormones.

Rām's temporary unconsciousness refers to the holistic value of the brain going into a silent state for a while, and provoking a reaction to awaken the entire physiology. This process also corresponds to the requirement that a cycle of rest and activity underlie another powerful step of action aimed at subduing the *Rākshasas*. Rām entered the state of rest and silence, and would be awakened by Hanumān.

There are several diseases related to abnormal secretion of cortisol and other hormones by the adrenal gland. Cushing's syndrome is caused by an increase in the secretion of cortisol, resulting in swelling of the body, weight increase, and the onset of allergies, as well as changes in blood pressure, perception, and blood fluids. A decrease or absence of cortisol can be catastrophic, as cortisol is necessary for normal functioning and must therefore be replaced



artificially if it is unavailable from the adrenal gland. Again we see the power of the holistic mechanisms of the hormone system, Hanumān, producing effects at every level of the physiology.

Hanumān displayed unbounded devotion to Rām, to Wholeness, and he fulfilled his functions in accord with the whole value of the Self, making sure that *Prakṛiti* and *Puruṣa* were never seen as separate. In this way, the hormonal system simultaneously performs hundreds of different functions, always ensuring that the entire body is balanced and functioning holistically. For example, Hanumān becoming very big<sup>13</sup> represents the presence of growth hormones that have the ability to make bones and muscle grow stronger. The proper level of these hormones must be maintained because an excess amount could cause gigantism or acromegaly, whereas too little leads to dwarfism.

Diabetes mellitus (commonly referred to as diabetes) is a common hormonal disorder that results from improper secretion of the hormone insulin, or the improper response to insulin by the tissues. There are two general types of diabetes, primary and secondary. Primary diabetes has two main categories, type I and type II. Type I is also called insulin-dependent diabetes mellitus or IDDM, and is caused by a lack of insulin secretion by the pancreas and a corresponding inability to control blood sugar levels. In this condition a patient usually needs insulin to be administered on a regular basis.

Type II diabetes is also called non-insulin-dependent diabetes. In this case the problem does not lie in the insulin secretion, but in the inability of the insulin to properly affect the tissues.

Conditions that might accompany diabetes can be caused by various deficiencies in glands controlled by the pituitary gland. This corresponds to imbalance in Sugrīva's area. The result of such an imbalance could be hypo- or hyperthyroidism, accompanied by diabetes mellitus. There could also be an elevation in parathyroid hormone with either normal, low, or excessively high levels of calcium in the blood. Excessive levels can sometimes cause

problems with bone formation and ovarian failure.

Another pituitary condition associated with diabetes mellitus is panhypopituitarism, which refers to abnormal functioning of the entire pituitary system. This causes many problems such as adrenal atrophy, gonadal atrophy, and diabetes mellitus.

Hormones are also involved in the control of bodily fluids. Vasopressin, for example, influences kidney activity and helps regulate fluids. There are many diseases in this area, related to abnormal water metabolism and water balance, which would be signified in the Rāmāyaṇ by an imbalance in some aspect of Hanumān.

Hypothalamic diseases can also cause water imbalances. For example, the regulation of urine production occurs in the hypothalamus, which produces the hormone vasopressin. After synthesis, the hormone is transported to the posterior lobe of the pituitary gland where it is stored for later release. Central diabetes insipidus is a type of fluid imbalance that occurs when there is inadequate tubular absorption of filtered water from the kidneys, as a result of vasopressin deficiency. This is not diabetes mellitus, but rather diabetes insipidus, directly relating to water balance.

If there is an increase in the secretion of vasopressin there may be excess water retention. In the Rāmāyaṇ this would be signified by an influence on Hanumān by either a higher or lower level of hierarchical control.

Each of the above-mentioned abnormalities are related to the part of the physiology that Hanumān represents, and are thus part of the story of the Rāmāyaṇ. One example that we examined earlier is the story of Rām sending his arrow to Drumakulya, which was contaminated.<sup>14</sup> Rām's arrow removed the toxicity from the area, illustrating the kidney's function of removing and cleansing toxic material from the body.

These beautifully detailed and scientifically precise descriptions of the

physiology are available in the Rāmāyaṇ. Hanumān is a great embodiment of Wholeness, an incarnation of Totality, who ensured that Rām is always understood and known to be *Purusha* with *Prakṛiti* within himself. By turning back to *Purusha*, to the total value of Natural Law, Wholeness is enlivened in every specific value. Hanumān plays a central role in Rām's quest to establish Wholeness on all levels of the physiology, representing the value of *Soma* and *Ojas* and the highest functioning of the molecules, hormonal systems, and messengers in the body. Hanumān allows the physiology to live the true dignity of perfection, Unity Consciousness. This detailed knowledge of Hanumān is the gift of the Holy Tradition of Vedic Masters, through Guru Dev and His Holiness Maharishi Mahesh Yogi.

### ***Footnotes***

1. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, section 10, pp 116–129.
2. Rāhu is one of the nine *Grahas*, or planets, in Jyotish. Rāhu is one of the lunar nodes and has the quality of hiding or releasing. Rāhu corresponds to the head of the caudate, which is involved in saccadic eye movements, aspects of memory concerned with spatial orientation, and in the ability to change behavioural sets (see *Human Physiology: Expression of Veda and the Vedic Literature*, p. 120).
3. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, Section 10, p. 120.
4. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, section 29.
5. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, Section 17.
6. A catalyst is a molecule or group of molecules that cause change while remaining unchanged.
7. See Chapter XVI, [Hanumān's Rescue of Rām, Lakshmaṇ](#).
8. See *Human Physiology: Expression of Veda and the Vedic Literature*, Chapter VIII, section 1.
9. See Chapter I, [figure 1.3](#).

10. See Rām Gives His Ring to Hanumān to Present to Sītā.

11. See Hanumān's Flight to Lankā.

12. See Chapter XVI.

13. See Chapter XIV, Hanumān Encounters Surasā and Simhikā.

14. See Chapter XV, The Crossing to Lankā.



## **Section IV:**

# **Genealogy of Creation**

# Chapter XX

## The Genealogy of Creation

### Part 1

#### Rām's First Meeting with the Eagle Jatāyu

**D**uring their travels in the forest, Rām, Sītā, and Lakshmaṇ encountered the enormous eagle Jatāyu, who would later provide Rām with vital information about Sītā's abduction.<sup>1</sup> When first observing this large and extremely ancient bird, Rām and Lakshmaṇ considered the possibility that he might be a terrible *Rākshasa*, and so they asked him who he was. Jatāyu replied that he had been a very dear friend of their late father. Rām then honoured him, and gently enquired as to his name and race. At Rām's request, Jatāyu offered the story of his origin in the context of the genealogy of all species:

पूद्घर्काले महाबाहो ये प्रजापतयोऽभद्वद्यन्  
तान्मे निगदतः सद्घर्कानादितः शृणु राघद्वद्य

*Pūrvakāle mahābāho ye prajāpatayo 'bhavan  
tān me nigadataḥ sarvān āditaḥ shṛiṇu Rāghava  
(Āraṇya Kāṇḍ, 14.6)*

*O Mighty Armed Rām, listen to me while I recount from the very  
beginning all the lords of creation who existed in the past.*

Jatāyu then unfolded the story of the birth of every major species, explaining how each descended from the *Prajāpati*, the lords of creation. The description revealed by Jatāyu is not only found in the Rāmāyaṇ, but throughout the Vedic Literature, in texts such as the Mahābhārat as well as in a number of Purāṇ. There are however, interesting variations between the



different descriptions. In this chapter and the next we will explore the main principles elucidated by Jatāyu and see how they correspond to human physiology, and how the variations between the different aspects of the Vedic Literature can be understood in terms of the physiology.

In our study, we have encountered many types of beings, creatures, and heroes, including great *Devatās* and *Rākshasas*, *Ṛishis* and Kings, as well as *Vānara*, *Ṛiksha*, and birds. We have seen that these beings are expressions of different levels of the manifestation of Natural Law, and that each is found in human physiology. We will now consider them in the context of the genealogy of creation, as outlined in the *Rāmāyaṇ*, the *Mahābhārat*, the *Purāṇ*, and other branches of the Vedic Literature.

## **Hierarchy of Beings and Their Place in Human Physiology**

We are aware that human physiology includes different organs and organ systems that are structured in a highly organized manner. The brain corresponds to Heaven, and the *Ṛishis* and many kings are located within the brainstem and midbrain area. We have also found some *Rākshasas* present in these areas, which correspond either to anomalies or to structures that are imbalanced or not functioning in tune with the whole physiology.<sup>2</sup>

The neck, shoulder, and chest area correspond to the space between Heaven and Earth, where we find the sky and birds in flight. In the lower part of the physiology, corresponding to Earth, we find human beings and animals. There are, of course, also animals that live inside the Earth, under the ocean, and in deep caves in subterranean regions.

The upper surface of the Earth corresponds to the dome-like structure of the diaphragm, which sits above the abdomen directly below the chest. The remainder of the Earth includes the entire abdominal area or mesentery, which contains physiological structures that correspond to beings living on Earth.

These landmarks help us understand the relationship between different aspects of the universe and the physiology, and provide a helpful framework as we examine the fine details of the genealogy of creation as described in the Vedic Literature (see [figure 5.1](#)).

## The Cardiovascular System

Let us first consider the cardiovascular system, since we will be examining the entire genealogy of creation in terms of the arteries. In previous chapters we have discussed how arteries generally correspond to mothers and queens who nourish their respective children and subjects.

*Cardiac* refers to the heart and *vascular* to the vessels, and thus the cardiovascular system concerns the heart and circulatory system. The heart is the centre of the cardiovascular system, sitting in the middle of the chest above the diaphragm. It has two sides, each with two chambers, and is divided by a structure called the septum. The left side of the heart contains bright red blood cells, while the cells in the right side are more bluish. The difference in appearance stems from the relative content of the blood: it is oxygenated on the left side, whereas on the right side it contains carbon dioxide.

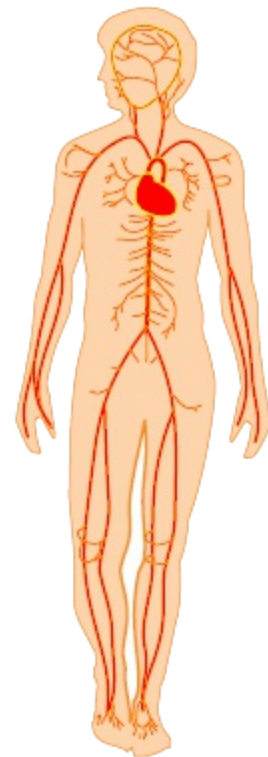
In Chapter II we examined the circulatory system and found that it comprises two connected loops. Loop 1 starts from the left side of the heart and pumps oxygenated blood to all parts of the body through arteries, which are like tubes extending between locations in the body, usually carrying oxygenated blood (the only exceptions being the pulmonary and umbilical arteries). Once the blood releases its oxygen to the various cells and collects carbon dioxide, it moves through veins to the right side of the heart. Loop 2 begins from the right side of the heart, where blood carrying carbon dioxide is pumped to the lungs. Once in the lungs, the blood releases the carbon dioxide and becomes re-oxygenated. Returning to the left side of the heart, it again enters loop 1 (see [figure 2.6](#)).

Within these two main loops, the circulatory system penetrates and encompasses each organ, creating interconnecting loops—a *Maṇḍala*-like network of vessels—throughout the body. Maharishi has explained that the Veda itself has a *Maṇḍala* form, with 10 *Maṇḍals* in Ṛk Veda, in which every organ system is found.<sup>3</sup>

Oxygen-rich blood flows from the left side of the heart through one major artery, the aorta, which makes a short curve upward, giving off branches towards the head, before curving downward to the rest of the body. Most arteries stem from the aorta, branching off like a tree: each branch splits into two or three smaller vessels, which continue splitting, becoming smaller and smaller until they reach every cell and tissue of the body. The branches of the aorta supply the different organs and structures of the body.

The arteries of the thoracic and abdominal aorta are generally divided into two broad categories: the parietal and visceral arteries. The parietal arteries supply blood and nutrients to tissues, such as muscles and connective tissue, as well as to other kinds of supportive structures. The visceral arteries supply the viscera, or internal organs, such as the lungs, kidneys, liver, pancreas, and stomach.

We have all had the experience of sitting in such a way as to put pressure on a nerve or on an artery, resulting in an arm or leg becoming numb and pale, and we may remark that the limb is ‘asleep’. This is due to reduced blood circulation, which means that the limb is not being adequately nourished. It is worth noting that any part of the body that is not supplied with blood and nourishment will become severely damaged in time. Indeed, without nourishment the brain can incur damage in just a few minutes.



**Figure 20.1**  
**Arterial system**

The blood contains both cells and fluid. The fluid is called plasma, and contains nutrients such as sugars, fats, and proteins. The primary cells of the blood are the red blood cells, white blood cells, and platelets. Red blood cells carry oxygen, white blood cells attack bacteria and foreign materials, and the platelets are involved in blood clotting.

### **Vishṇu and Lakshmī, *Purusha and Prakṛiti***

Rām is the incarnation of Vishṇu, total dynamism, while Sītā is the incarnation of Vishṇu's *Prakṛiti*, Lakshmī.<sup>4</sup> We will now focus on their relationship in the physiology in order to understand how the different aspects of the genealogy of creation can be understood as aspects of the cardiovascular system, represented by the different values of Lakshmī.

Vishṇu and Lakshmī are *Purusha* and *Prakṛiti*, and therefore not separate from other values. But it is important to remind ourselves that everything is ultimately one unbounded ocean of pure consciousness in motion, and that *Purusha* and *Prakṛiti* are ultimately one reality with no separation between them. Indeed, *Prakṛiti* is the nature of *Purusha*.

We can consider this perspective by way of an example. When we observe a flower we might say that it is red and soft—considering it from the perspective of its colour we say that it is red and considering it from the perspective of its texture we say that it is soft. Both its softness and its red colour are part of the flower. In the same way, *Purusha* and *Prakṛiti* are at the basis of all aspects of creation, and the different elements of the material world are not separate from them.

Maharishi often compared the relationship between relative objects and their unmanifest source to that of a flower and its sap. He explained that the sap of a flower is undifferentiated, yet it gives rise to and pervades every differentiated aspect of the plant, including the petals, leaves, stem, thorns, etc. Within the sap are all the values of the tender petals as well as the value

of the prickly thorns. Thus the redness of the flower and its softness are both contained within the sap, and so ultimately are sap. In the same way, unmanifest pure Being is present in every grain of creation.

Maharishi has explained again and again that in Unity Consciousness we perceive all aspects of life—the sap and all its expressions—in terms of Unity. Similarly, from one point of view *Purusha* and *Prakṛiti* can be seen to possess different qualities, but from the perspective of Unity they are one and the same—there is no separation between them. They are everywhere, in everything. Although *Purusha* is usually accorded a male quality and *Prakṛiti* a female quality, both are together in everyone and nothing exists in the manifest universe without their coexistence.

We saw in Chapter XVIII that Sītā was not touched or harmed in any way when she immersed herself in the fire. Even though she is *Prakṛiti*, she is pure and beyond the elements. Sītā represents the value of *Purusha* in terms of *Prakṛiti*, but she was untouched by the specifics of *Prakṛiti* that could alter her. Even though she is the power of manifestation of all specifics, her deepest nature is entirely holistic *Purusha*—infinite and unbounded, and therefore untouched by relative, or changing, values.

Towards the end of the Rāmāyaṇ, we see that the oneness of *Prakṛiti* with *Purusha* is the basis of the immortality of *Prakṛiti*—the changing reality of *Prakṛiti* is always on the basis of eternity and infinity. Even though specific, its true nature is holistic. Every specific aspect is ultimately holistic, and all the specifics together are also holistic, even though from the perspective of waking state of consciousness the specific values are all performing different functions. This is the reality of Natural Law.

We therefore keep in mind that everything is the expression of one unbounded ocean of consciousness in motion. The intellect, while analysing the various expressions of that ocean of consciousness, starts to see differences and describes them and gives them names. This is how *Purusha* is described as predominantly the silent value and *Prakṛiti* as predominantly the

dynamic value. We saw in Chapters III and IV that *Purusha* has three different values, and similarly *Prakṛiti* has three values. In fact, seen from different perspectives, thousands of values emerge to describe each, with thousands of names and shapes to represent them. One of the Supreme *Prakṛiti* aspects highlighted below is that of Mahālakshmī Devī. We focus on that aspect of *Prakṛiti* because we are told that Sītā is an incarnation of Mahālakshmī Devī.

## Sītā, the Cardiovascular System

### The Twofold Nature of Sītā

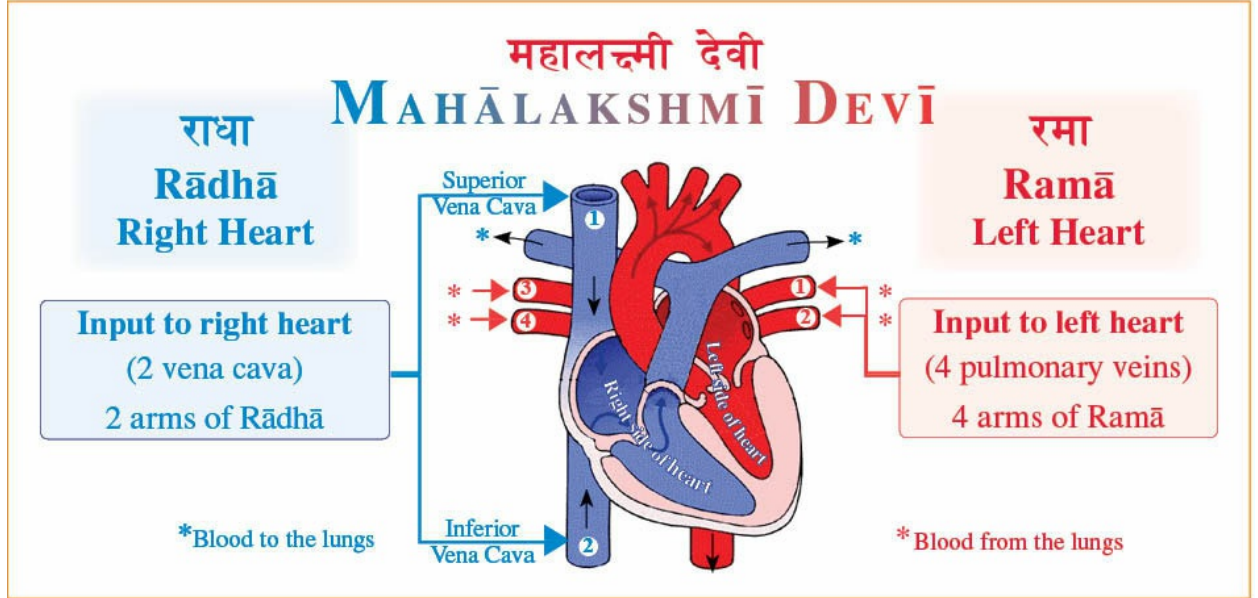
In the discovery of Veda and Vedic literature in human physiology,<sup>5</sup> we found that Mahālakshmī Devī is located in the heart,<sup>6</sup> her four arms corresponding to its four chambers. Mahālakshmī is not only in the heart, she is also in everything and everyone as a profound aspect of Natural Law. Her qualities are, however, expressed predominantly in certain aspects and less in others. In the human physiology, the structure and function of the heart most resembles the description of Mahālakshmī Devī.

Sītā is an incarnation of Mahālakshmī, and therefore is also located in the heart. The term ‘Sītā’ literally means *furrow*, which became Sītā’s name because she was found in a furrow when King Janaka was ploughing a field in preparation for a *Yagya*. This indicates that Sītā is more than an ordinary woman, because she was born directly from Mother Earth.<sup>7</sup> The term ‘furrow’ can also be seen as a reference to Sītā’s twofold nature.

According to the Shrīmad Devī Bhāgavatam,<sup>8</sup> Devī, or Mahālakshmī, divided herself into two parts. Her right side was called Rādhā, and her left side Ramā, also called Lakshmī.<sup>9</sup> In the right atrium of the heart, Rādhā receives the de-oxygenated bluish blood with her two arms from the two openings of the superior and inferior vena cava, and passes it into the right ventricle. From there it is expelled to the lungs for oxygenation. In the left atrium, Ramā receives the freshly oxygenated reddish blood from the openings of the



four pulmonary veins with her four arms, and passes it into the left ventricle. From there it moves into the aorta to nourish the whole physiology. This constant flow of take and give, receive and expel, is described by the Sanskrit word for ‘heart’—*Hṛidaya*: *Hṛi*, ‘takes’; *Da*, ‘gives’; and *Ya*, ‘that which’.



**Figure 20.2** Mahālakṣmī corresponds to the heart. Rādhā and Ramā (Lakṣmī) correspond to the right and left sides of the heart respectively.

As we discussed earlier, Lakṣmī is not solely an aspect of the heart’s structure and function. In *Human Physiology: Expression of Veda and the Vedic Literature*, for example, we saw that in the blood she corresponds to the red blood cells, while Durgā corresponds to the white blood cells and Saraswatī to the plasma.

The following expression from the Vedic Literature, which reveals how Lakṣmī emerges from Wholeness and illumines the quarters, succinctly describes the rush of blood from the left side of the heart as it flows out to nourish the entire physiology.

ततश्चाद्विद्यरभूत् साक्षात् श्रीरमा भगद्वद्यत्परा

रञ्जयन्ती दिशः कान्त्या द्विद्यद्युत् सौदामनी यथा

*Tatashchāvir abhūt sākshāt Shrī-Ramā-Bhagavat-parā  
ranjayantī dishaḥ kāntyā vidyut saudāmanī yathā  
(Shrīmad Bhāgavatam, 8.8.8)*

*Then again appeared Ramā, who is affluence personified and devoted to the Lord, illuminating the quarters with her splendour, like lightning flashing against the crystalline mountain range called Saudāma.*

Since every Sanskrit expression is of great significance with reference to the heart, each is briefly analysed below:

*Tatashcha*: ‘and then’—after the blood left the right heart to go to the lungs for oxygenation;

*avirabhūt sākshāt*: ‘appeared before the eyes’—appeared in the left atrium. The four pulmonary veins enter in pairs, looking like two eyes on each side;

*Shrī Ramā*: ‘Shrī Ramā’—Lakshmī;

*Bhagavat-parā*: ‘devoted to the Lord in his transcendental form’;

*ranjayantī*: ‘reddening’—the incoming freshly oxygenated blood is reddish;

*dishaḥ*: ‘quarters’—refers to Ramā’s four arms;

*kāntyā*: ‘with her splendour’—the beauty of the heart and the whole physiology;

*vidyut*: ‘flashing, lightning’—stimulated by the autonomic nervous system;

*Saudāmanī*: ‘part of the Saudāma mountain’—the physical structure of the heart with its caves and muscles built like a mountain, from which the bright ‘shining’ blood cells rush forth;

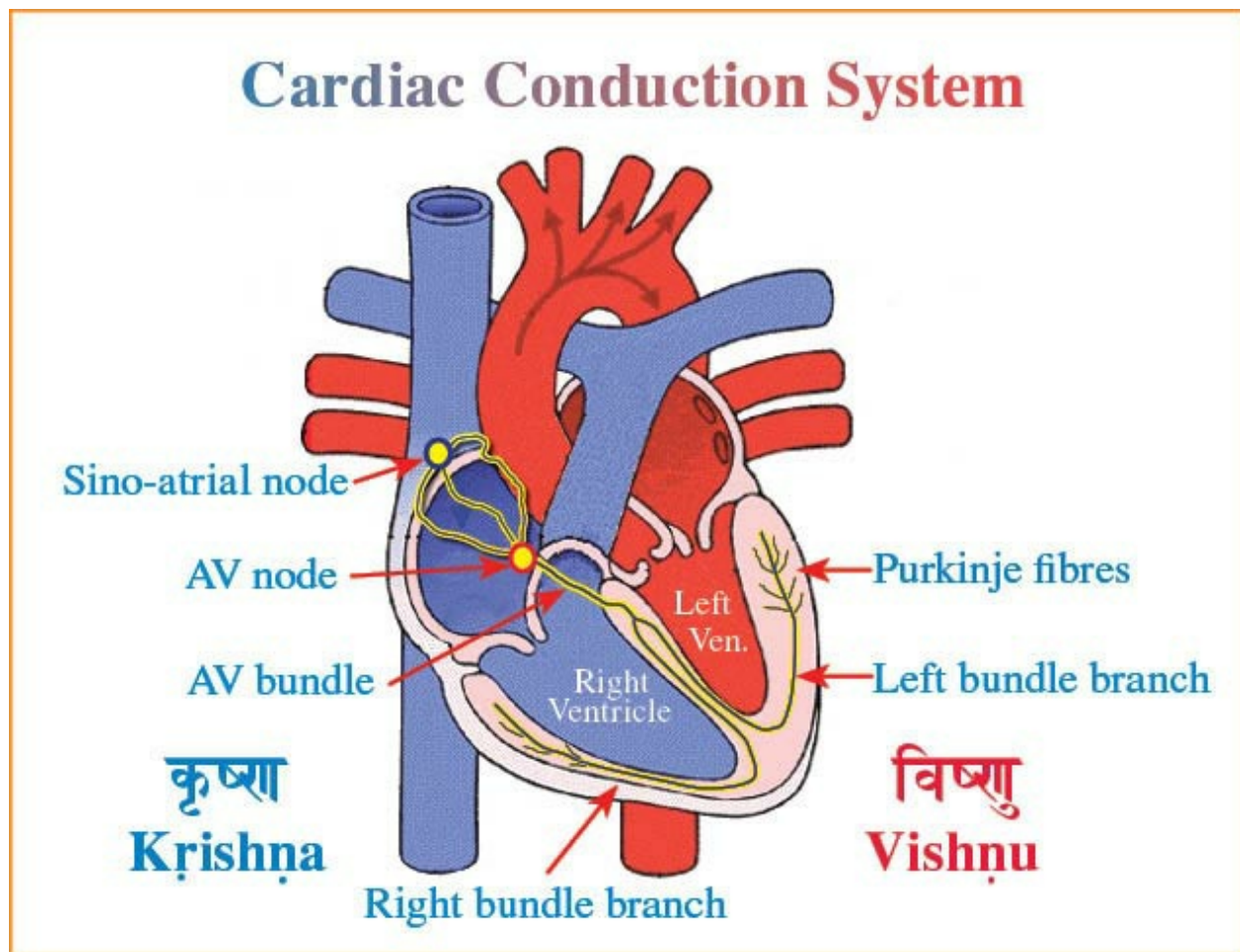
*yathā*: ‘like’.

## The Conduction System of the Heart

After Mahālakshmī divided herself, Lord Kṛishṇa also divided himself. From his right side came the two-armed Kṛishṇa uniting with his *Prakṛiti*, Rādhā, and from his left side came the four-armed Viṣṇu, uniting with his *Prakṛiti*, Lakshmī (Ramā).<sup>10</sup>

This Vedic description corresponds to the cardiac conduction system made of heart cells specialized for electric impulse conduction, which consists of:

- the sino-atrial (SA) node—the self-exciting pacemaker on top of the right atrium, which continually sets the heart rate and rhythm;
- the atrio-ventricular (AV) node at the junction between atria and ventricles, from which the impulse travels down;
- the AV bundle, which literally splits into two main bundle branches;
- these further divide in the right and left ventricle into innumerable Purkinje fibres;
- these fibres transmit the impulse conduction to every single muscle cell of the heart.



**Figure 20.3 The conduction system of the heart, inspired by Kṛishṇa in the right side of the heart and Viṣṇu in the left side of the heart.**

These first united and then divided aspects of the heart's conduction system correspond to the two-armed Kṛishṇa and the four-armed Viṣṇu respectively, who endowed with the witnessing quality of *Purusha*,<sup>11</sup> without contracting or moving, inspire the complex mechanism of a time-ordered, precise, and sequential impulse transmission to all the heart's muscle cells to contract and pump the blood into the two respective circulatory systems.

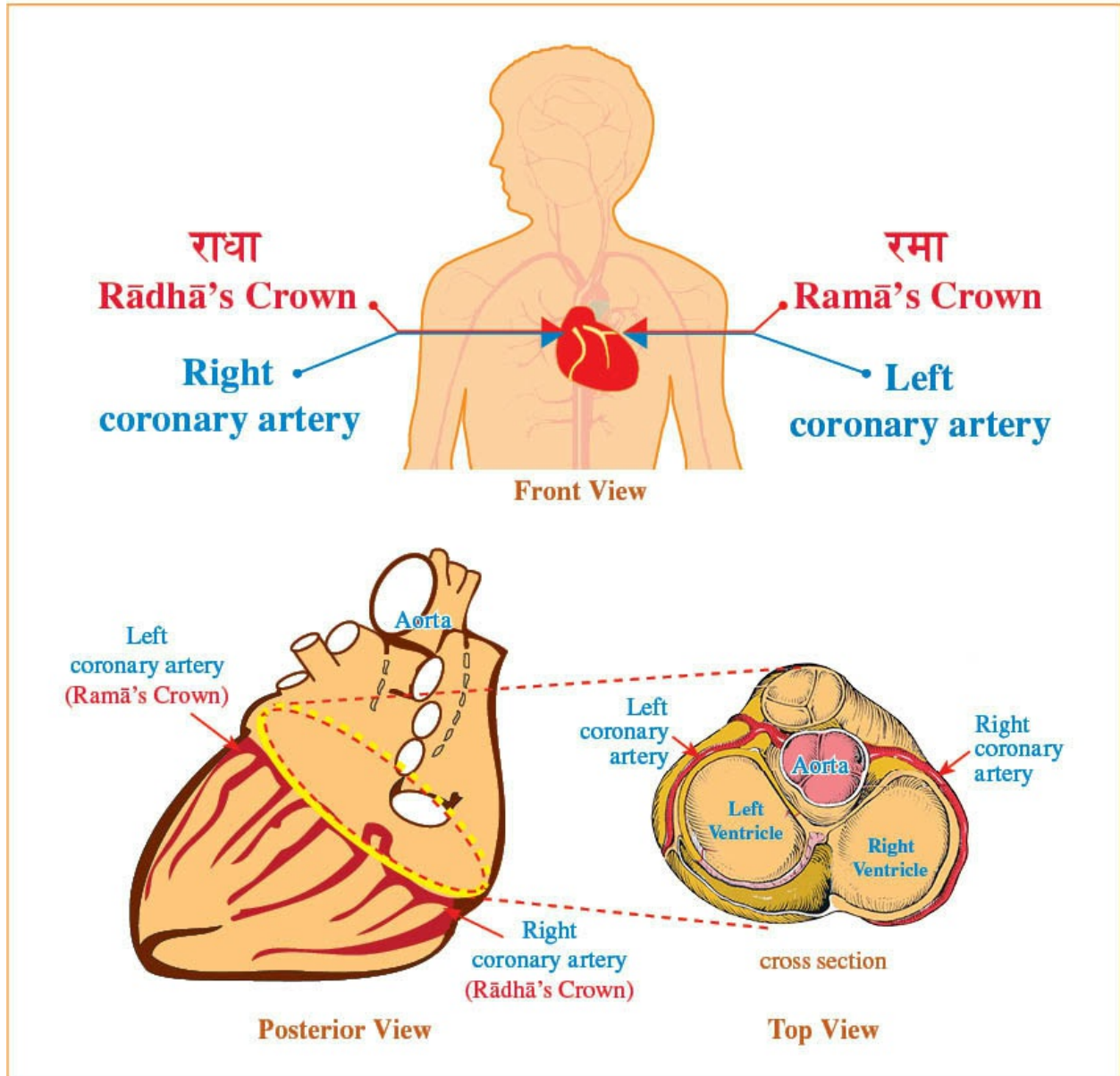
From Maharishi Āyur-Veda we know that the heartbeat felt during pulse diagnosis accurately reflects the physical, mental, and emotional health of an individual, because the pulse is generated from the silent level of Transcendental Consciousness.<sup>12</sup> Scientific research confirms that regular

experience of Transcendental Consciousness through the Transcendental Meditation Programme is the most effective and natural way to cultivate coherent brain wave activity along with an even, coherent heart rhythm, thereby optimizing the functioning of the nervous system (Rām), the cardiovascular system (Sītā), and their integrated functioning on the basis of a fully developed heart and mind.

### **Coronary Arteries Forming the Rāsa Maṇḍala—The Crowns of Rādhā and Rāmā**

We have seen that Sītā is an incarnation of Mahālakshmī, and is located in the heart, nourishing the brain and every aspect of the physiology through the twofold nature of the cardio-vascular system. Yet who is nourishing Sītā? who is nourishing the heart? It is the heart itself, and that is the self-referral nature of Sītā.

The first part of blood circulation is the aorta, and the coronary arteries are its first branches. Freshly oxygenated blood circulates through the coronary arteries, which form two ‘crowns’ (‘corona’ means *crown*, wreath, or garland) encircling the heart, as shown in figure 20.4.



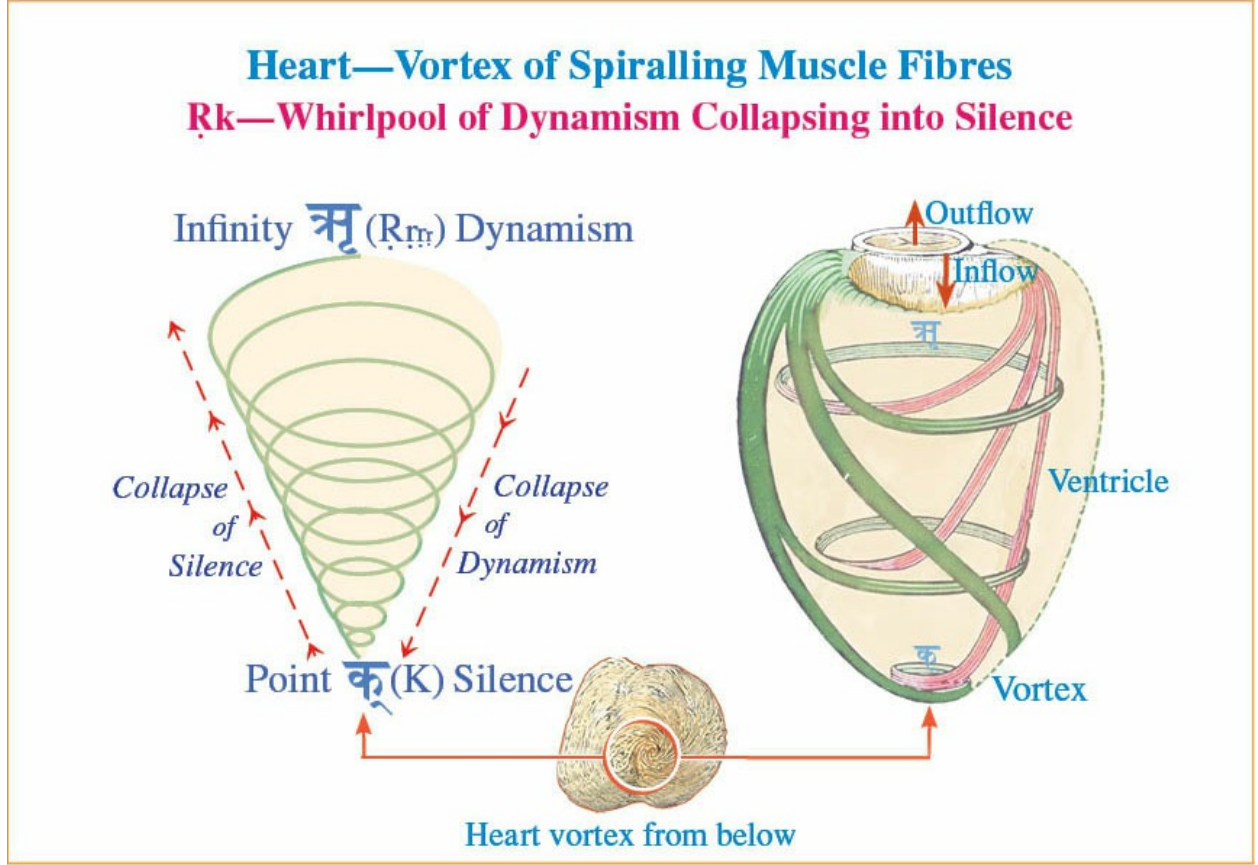
**Figure 20.4** The left and right coronary arteries form the Rāsa Maṇḍala, which nourishes Sītā, the heart. Rādhā's crown is on the right side and Ramā's crown on the left.

The freshly oxygenated blood flows from the root of the aorta into the two coronary arteries, supplying the heart cells with oxygen and nutrients, perfusing mostly during heart relaxation (diastole, when the ventricles are relaxed and filling). This unique physiological situation requires relaxation rather than pressure for the heart to be properly nourished.



The pulsating blood flow in the coronary arteries, and the circular—or ‘crown-like’—arrangement of the coronary arteries around the heart, can be compared with the *Rāsa Maṇḍala*, the circular dance of the *Gopīs* and *Gopas* around Kṛishṇa, as described in the Vedic Literature.<sup>13</sup> The Sanskrit *Rāsa* means ‘uproar’ and also refers to a particular kind of dance, and *Maṇḍala* is a circular structure or pattern. In the structure and function of the heart we can observe an ongoing circular ‘dance’ to the rhythms and melodies of the heartbeat, which keeps all the innumerable functions of the body in tune with the rhythms of nature.<sup>14</sup>

Furthermore, the spiral structure of the muscle fibres of the heart and their incessant rhythm of dynamism and silence resembles the eternal whirlpool of R̥k and Ak from infinite dynamism to infinite silence.<sup>15</sup> The fascinating spiralling and looping pattern of the heart fibres—which form a vortex at the tip of the heart where the outer downward spiralling fibres turn inside and spiral upwards again—causes the rhythmic, pulsating blood stream that is flowing through the heart to create loops and vortices, as if dancing.



**Figure 20.5** The collapse of silence into dynamism and dynamism into silence as revealed in the eternal structure of R̥k Veda is reflected in the rhythmic contraction and relaxation of the spiralling muscle fibres of the heart.

Thus we see in the heart and its coronary arteries the blissful unity of *Purusha* and *Prakṛiti* surrounded by the *Rāsa Maṇḍala*, also described as *Kṛishṇa Līlā*—the eternal dance of the *Gopīs* and *Gopas* encircling Totality at the basis of creation. This Unity is the *Laksh*, the goal, of Lakshmī, embodied in Sītā.

आनन्दाद्धयेद्धद्य खल्लिद्धयमानि भूतानि जायन्ते  
 आनन्देन जातानि जीद्धयन्ति

आनन्दं प्रयन्त्यभिसंद्ध्यशन्ति

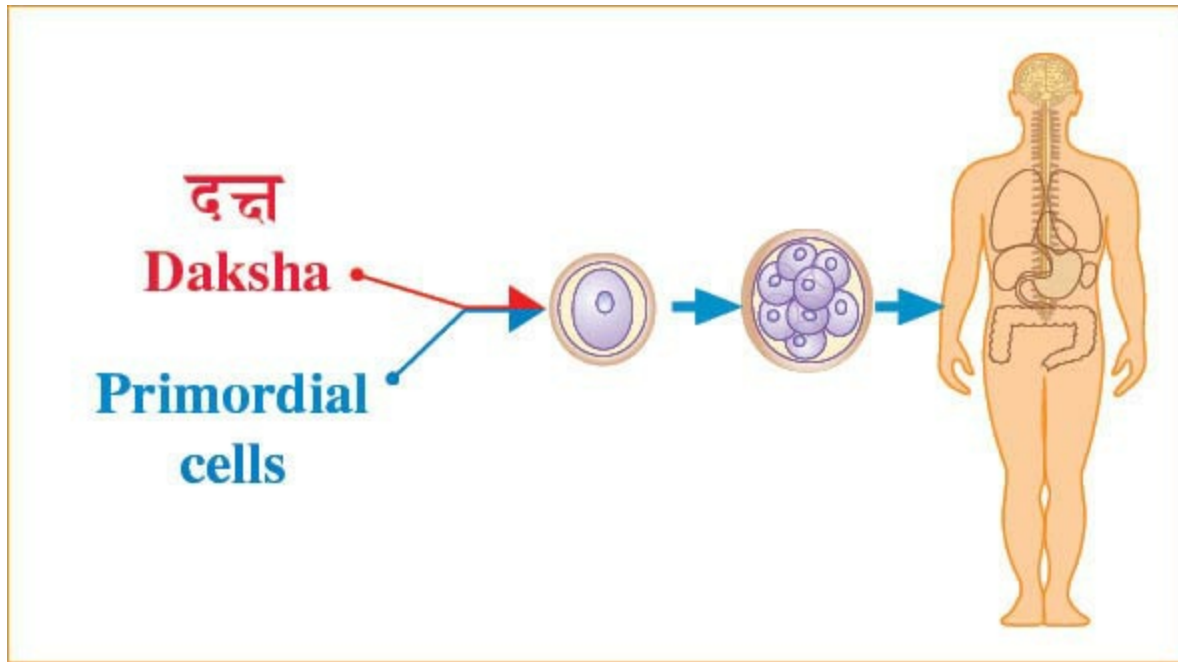
*Ānandād dhyeva khalwimāni bhūtāni jāyante  
ānandena jātāni jīvanti  
ānandaṁ prayantyabhisamvishanti  
(Taittirīya Upanishad 3.6.1)*

*Out of bliss these beings are born,  
in bliss they are sustained,  
and to bliss they go and merge again.*

### **The Descendants of Daksha**

The Vedic Literature reveals that the *Prajāpati*<sup>16</sup> are the sons of Brahmā, who created the universe and expressed themselves into innumerable aspects of Natural Law. One of the *Prajāpati* was Daksha, who had 60 daughters with his *Patnī* Asiknī,<sup>17</sup> and 24 daughters with his *Patnī* Prasūti.

The *Prajāpati* are located mostly in the brainstem area, and represent the seat of sensory and motor activities. They are the most basic switchboards for all possible experiences and actions within the physiology, and are situated in the area of the *Ṛishis*, because the *Sapta Ṛishis*, the seven principal *Ṛishis* described in detail in Chapter XVII, are included among the *Prajāpati*.



**Figure 20.6 Daksha corresponds to the primordial cells.**

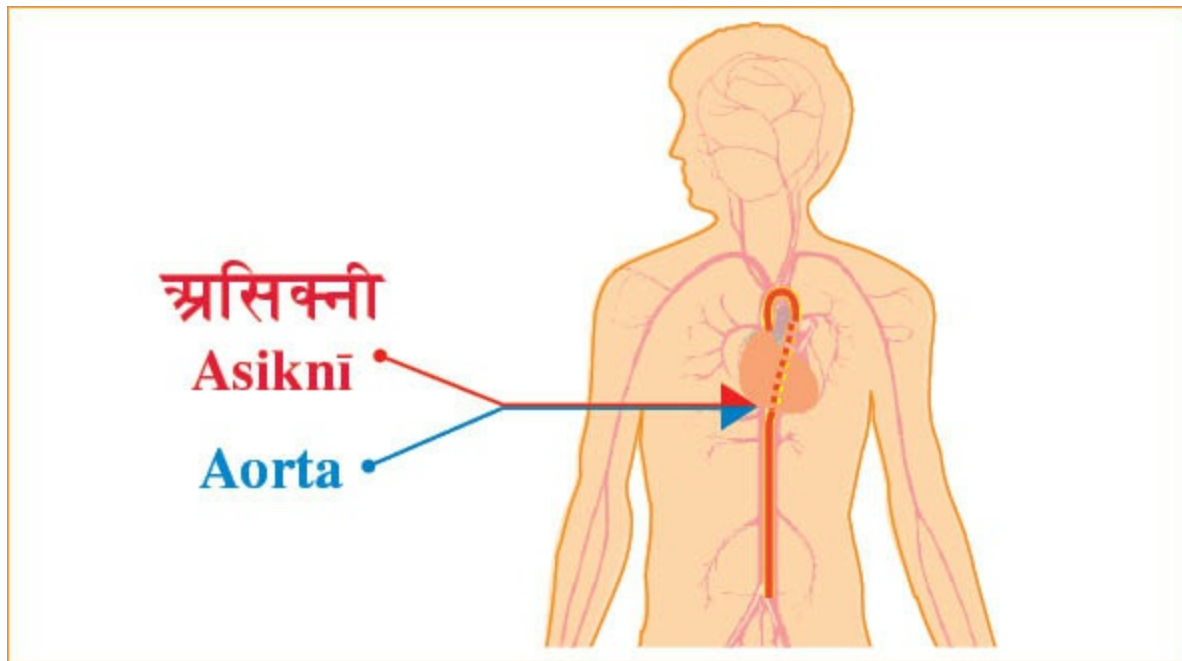
Daksha represents the body's primordial cells, which differentiate into the vast number of specialized cells.<sup>18</sup> Daksha's first *Patnī* was Prasūti and his second Asiknī, both of whom represent different values of differentiation.<sup>19</sup> *Prasūti* means 'procreation', 'birth', 'creating', and can also refer to 'mother' and 'father'. Thus the energy and intelligence that create the force of differentiation is available in Prasūti.

Prasūti's daughters are the qualities of Natural Law that lead to the differentiation of each aspect of the physiology—they embody the organizing intelligence of Natural Law that structures the basic logic of functioning of every part of the body. Prasūti and her daughters therefore represent the essence of the entire physiology's intelligence in terms of its manifestation, or *Prakṛiti* value.

Some of Prasūti's 24 daughters married different *Prajāpati*, while the others married Dharmadev. Dharmadev represents the values of *Dharma*, which embody actions in accord with Natural Law. These values are represented in the ten *Patnī* of Dharmadev, and include *Buddhi*—the intellect; *Kīrti*—fame,

renown, and speech; *Lakshmī* (as a quality) and *Pushti*—wealth and nourishment; *Shraddhā*—confidence, loyalty, and faith; and *Siddhi*—performance and perfection.

Asiknī, Daksha's other *Patnī*, corresponds to the physiology's nourishing and sustaining aspects. Asiknī corresponds to the aorta, and is thus the great-grandmother of all arteries.<sup>20</sup> Asiknī's progeny can be located in the different structures of the circulatory system.



**Figure 20.7** Asiknī, the *Patnī* of Daksha, corresponds to the aorta, the origin of all arteries (see [figure 21.39](#)).

### Divided and Undivided: Diti and Aditi

The two principal daughters of Asiknī are Diti and Aditi, who later became the progenitors of the *Daitya* and *Āditya* (see below). Diti means ‘cutting’ or ‘dividing’, and was so named because Indra split her embryo into two. Aditi—A-Diti—means ‘not divided’. Aditi represents the full value of ‘A’, which Maharishi has described as the sound that embodies Wholeness. These qualities are displayed by her sons, the *Āditya*—administrators of Natural

Law.

The *Āditya* and *Daitya* are a primordial value of reality that emerged at the beginning of creation, who churned the ocean of life together in the beginning days. The *Āditya* are *Devatās*, while the *Daitya* are associated with the destructive side of Natural Law, and are regarded as a kind of demon. The *Daitya* are sometimes confused with *Rākshasas*, but in reality they represent two different races with separate genealogies.

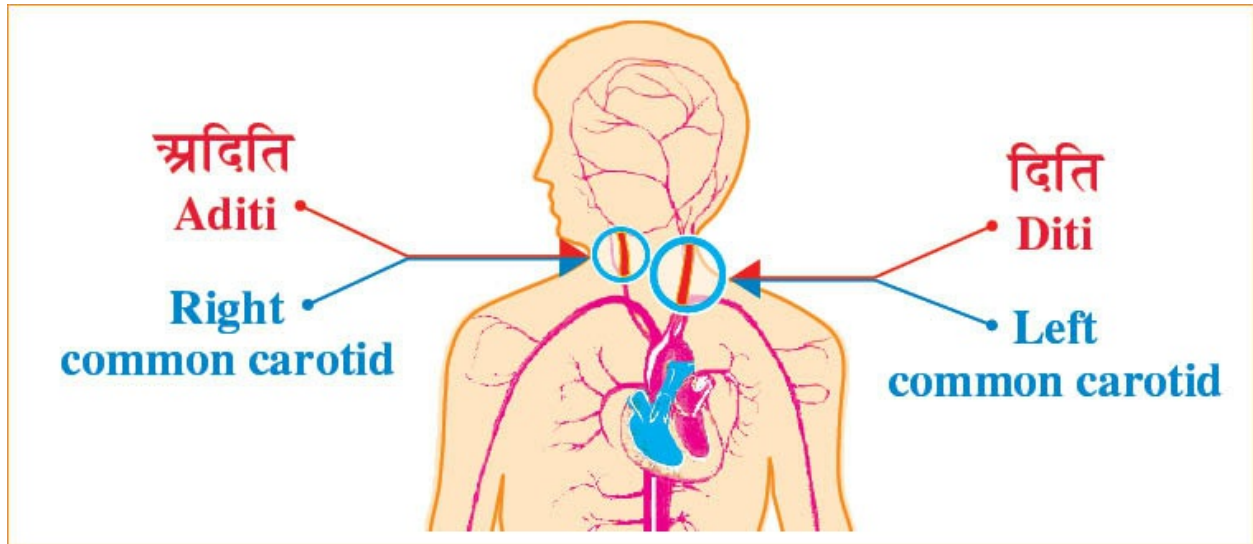
The *Āditya* and *Daitya* cooperated in churning the ocean of life to produce *Amṛit*—the nectar of immortality—and were only able to bring it forth through their mutual effort. The *Daitya* and *Āditya*, therefore, represent the full divine power of Natural Law, from both its specific and general perspectives. It is the churning between specificity and generality that leads to the expression of life in its fullness. Immortality is the result of being able to hold together all specific values while maintaining wholeness—the ability to see the reality of Unity within diversity.

The churning that produces *Amṛit*, or immortality, corresponds to the churning between the right and the left sides of the brain, which allows us to express life from the perspective of wholeness. The right side of the brain, corresponding to the *Āditya*, is more general, more holistic in nature, more musical and artistic. The left side, corresponding to the *Daitya*, is more specific, more analytic, and more mathematical in nature. It is the combination of the two halves that produces the full value of wholeness. True wholeness is the combination of the ability to view the specific along with the general.

When we try to locate the physiological expression of Diti and Aditi, we must first examine *Asiknī*, the aorta. The aorta curves up, and on the right side becomes one undivided branch—the brachiocephalic trunk. This trunk produces a branch to the right arm called the right subclavian artery, and then proceeds towards the head, where it becomes the right common carotid artery.



On the left side, the common carotid artery is already divided from the aortic point and goes straight to the brain, separate from the subclavian artery.<sup>21</sup> Thus on the right side we have an undivided artery and on the left side we have a divided artery. Aditi is the brachiocephalic artery on the right side, which becomes the right common carotid, and Diti is the left common carotid artery.



**Figure 20.8 Aditi corresponds to the right common carotid artery. Diti corresponds to the left common carotid artery.**

Aditi controls the blood flow to the right arm, some aspects of the right chest area, and the entire right side of the head, neck, and brain. Nourished by Aditi and her children, these areas send communicating arteries to each other on many levels.<sup>22</sup> These communicating arteries connect one artery to another and represent an aspect of the churning process, again illustrating the intimate relationship between them.

Asiknī had 60 daughters with Daksha, who married several different husbands. Thirteen, including Diti and Aditi, married Kashyap, ten married Dharmadev, four married Arishtanemī, two married Angiras, two married Bahuputra, two married Kṛishāshwa, one married Shiva, and twenty-seven married Soma. These daughters are the principal arteries emanating from the

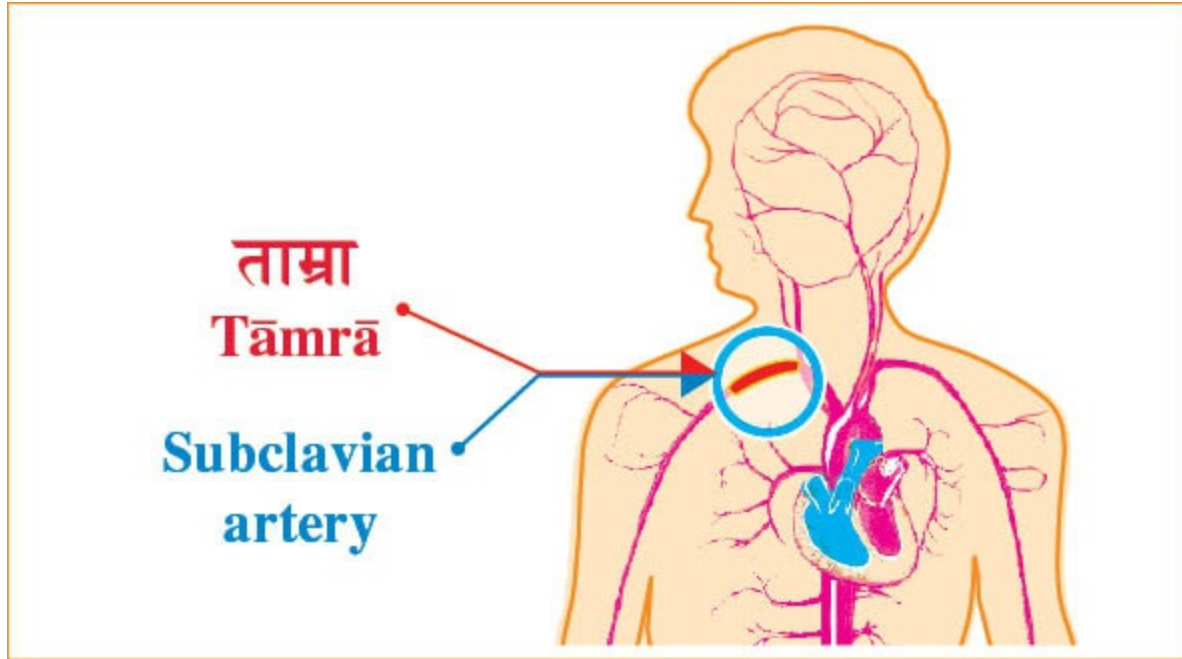
aorta.<sup>23</sup>

Most of the characters found in the Rāmāyaṇ and Mahābhārat are the progeny of Kashyap. Some are connected with the progeny of other *Prajāpati* who married daughters of Daksha, such as Pulastya, the father of the *Rākshasas*. Kashyap is located in the brainstem, in particular in the midbrain,<sup>24</sup> which is also the seat of Chakravartī, the controller of basic functions of the physiology such as breathing, heart rate, and consciousness. Kashyap is said to be the progenitor of human beings, *Devatās*, *Asuras*, animals, trees, *Vānara*, etc. And we know that Kashyap figured prominently in the Rāmāyaṇ, incarnating as Dasharath, whose promise to Kaikeyī led to Rām's exile and the subsequent events of the Rāmāyaṇ.

### **Subclavian Artery and Its Branches: Tāmrā, the Mother of Birds, and Her Descendants**

Let us now consider the arteries of the neck, chest (including the lungs and heart), and upper extremities. This area represents all the human beings living on Earth, as well as the birds in the sky around Earth.

The subclavian artery branches from the aorta on both the right and left, extending to the upper extremities. The upper extremities and upper arms correspond to the wings of birds. Tāmrā, one of Kashyap's *Patnī*, is the mother of birds, and therefore corresponds to the subclavian artery.



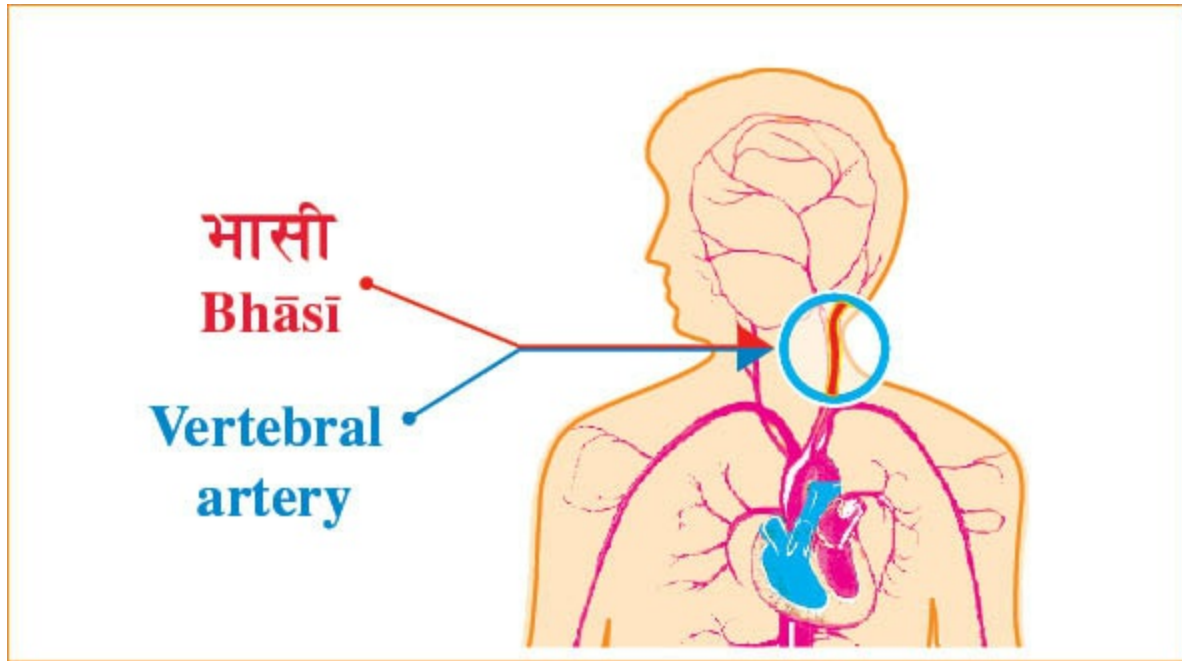
**Figure 20.9 Tāmra, the mother of birds, corresponds to the subclavian artery.**

Tāmra had five daughters, who are the progenitors of the different varieties of birds, including owls, hawks, eagles, swans, and geese, as well as a separate category that includes Garuda, the king of birds, along with Sampāti and Jatāyu, whom we discussed in Chapter XII.<sup>25</sup> Tāmra’s daughters correspond to the five branches of the subclavian artery, some of which nourish parts of the respiratory system. Since air is naturally associated with birds in flight, the correspondence between Tāmra’s daughters and the branches of the subclavian artery is completely appropriate.

The five branches of the subclavian artery, which correspond to Tāmra’s five daughters, are: the vertebral artery, Bhāsī; the axillary artery, Shyenī; the internal thoracic artery, Dhṛitarāshtrī; the thyrocervical trunk, Shukī; and the costocervical trunk, Kraunchī.

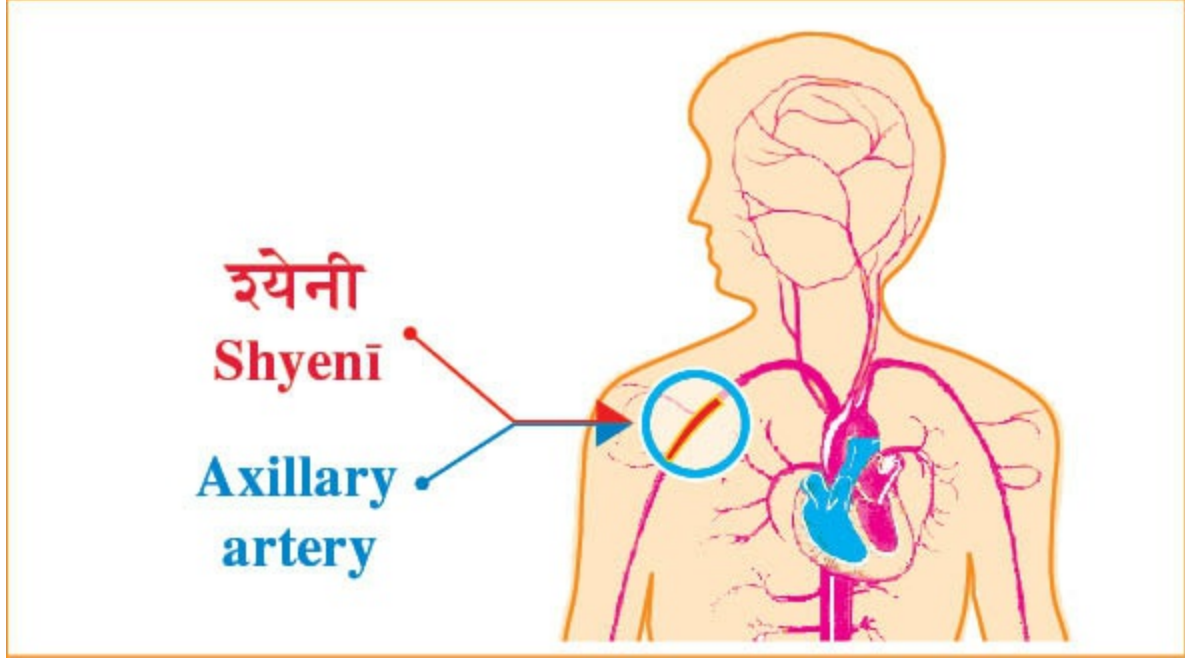
The vertebral artery, Bhāsī, extends to the nervous system, where it plays a significant role and connects to vessels nourishing different parts of the brain. Bhāsī is the mother of Bhāsas, a type of *Deva* that naturally belongs to the

area of the brain. Bhāsī's mother is the mother of birds who also nourishes the brain—the heavenly part of the physiology.



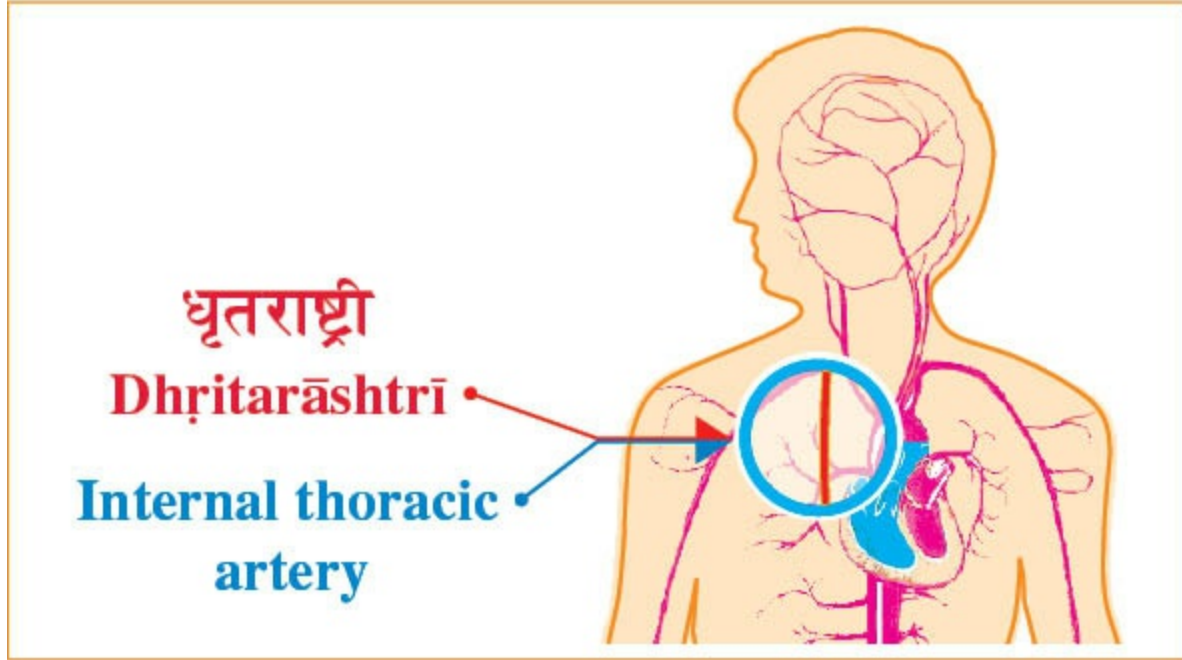
**Figure 20.10 Bhāsī, one of Tāmrā's five daughters, corresponds to the vertebral artery.**

The axillary artery, Shyenī, goes to the arms. Shyenī is the mother of hawks and eagles, who possess powerful wings, and it is therefore appropriate that Shyenī corresponds to the axillary artery.



**Figure 20.11 Shyenī, one of Tāmrā's five daughters, corresponds to the axillary artery.**

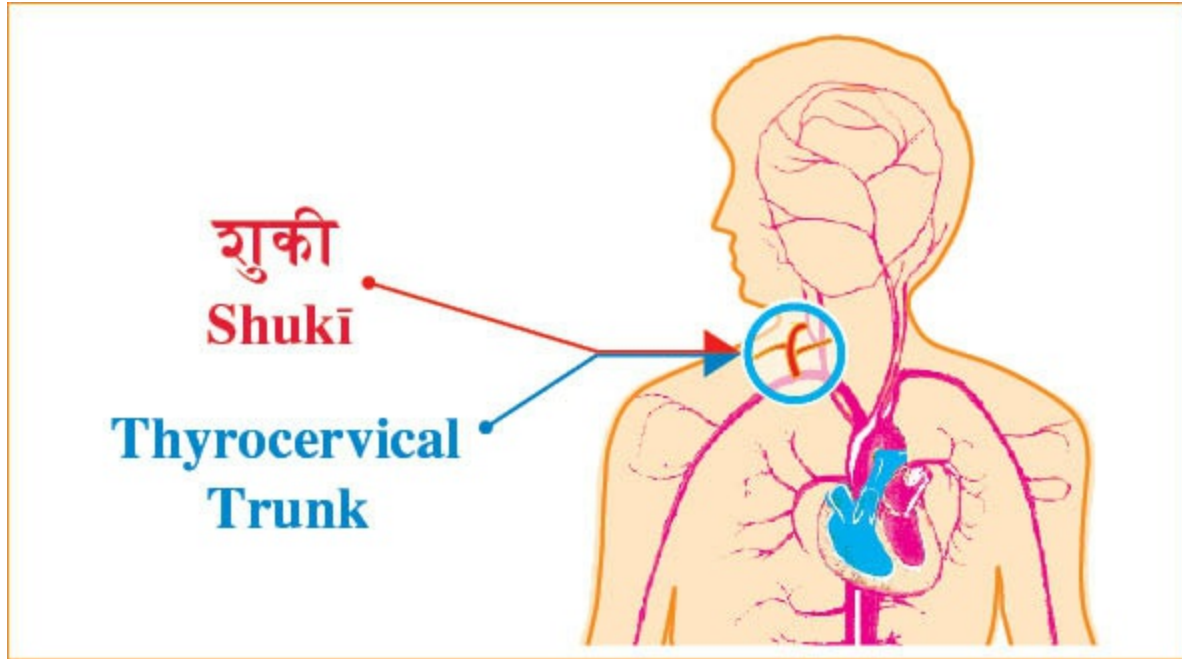
The internal thoracic artery corresponds to Dhṛitarāshtrī, the mother of swans and geese. It travels to the anterior chest wall and supplies the breast, intercostal muscles, anterior mediastinum, lungs, pericardium, diaphragm, and the anterior abdominal wall through its branches.



**Figure 20.12 Dhṛitarāshtrī, one of Tāmrā's five daughters, corresponds to the internal thoracic artery.**

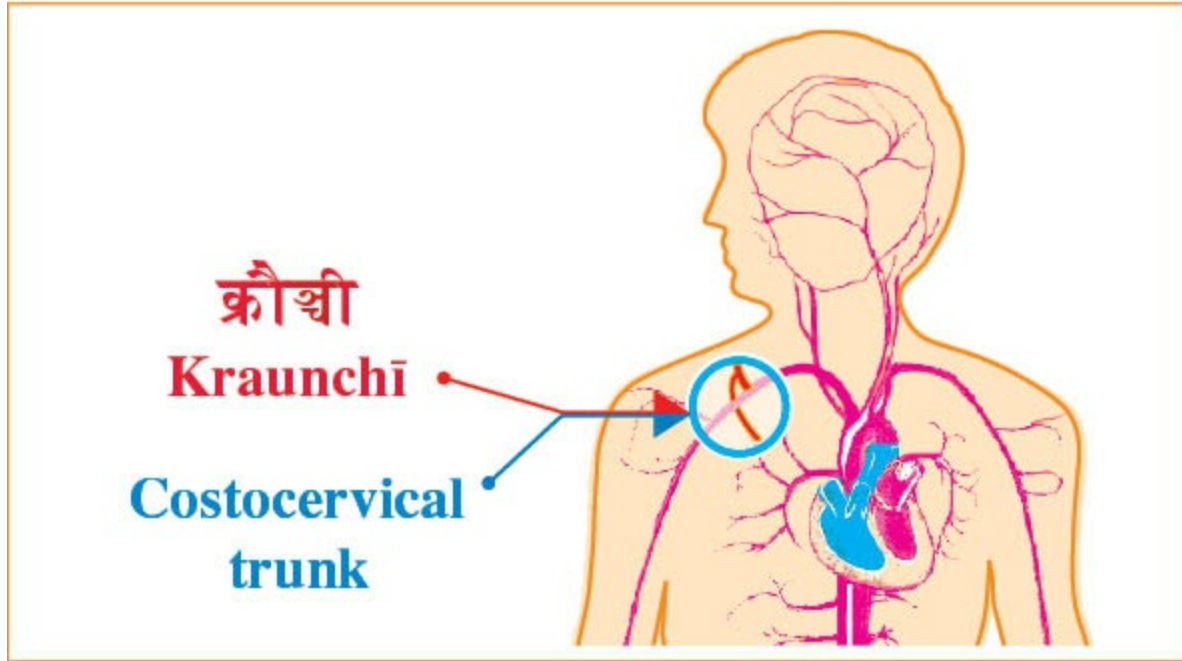
The thyrocervical trunk corresponds to Shukī, who is Garuda's great grandmother and the grandmother of Vinatā. The thyrocervical trunk arises from the subclavian artery and sends blood to various parts of the breathing system, including the larynx, pharynx, oesophagus, and trachea, as well as to other parts of the spine at this level of the physiology.





**Figure 20.13 Shukī, one of Tāmra’s five daughters, corresponds to the thyrocervical trunk.**

Kraunchī is the mother of owls and corresponds to the costocervical trunk, which extends to a number of small muscles around the chest area that move with the breathing process.



**Figure 20.14 Kraunchī, one of Tāmrā’s five daughters, corresponds to the costocervical trunk.**

### **Paradoxes Resolved: Daughter or Granddaughter**

As we compare the descriptions from the Vedic Literature and their corresponding physiological structures, there are some very interesting findings. For example, the Rāmāyaṇ describes Vinatā as the granddaughter of Shukī, and hence the great-granddaughter of Kashyap,<sup>26</sup> whereas the Mahābhārat describes her as a daughter of Prajāpati who married Kashyap.<sup>27</sup> This situation is slightly complex, for Vinatā is the mother of Garuda and Aruṇa and the grandmother of Sampāti and Jatāyu. And since this role is quite significant in the Vedic Literature, it is clear that she must have a correspondingly important role in the physiology.

Vinatā corresponds to the pulmonary veins, which emerge from the lungs and proceed directly to the heart. At first glance it might seem that the mother of these great and powerful birds, including the king of birds, should be an artery rather than a vein, for arteries tend to be associated with queens and

mothers, whereas veins are associated with servants. But when we examine the arteries and veins extending to the lungs we find that their respective roles are unique.

There are two types of circulation in the lungs. The first involves blood coming from the aorta via the subclavian artery to the intercostal arteries and bronchial artery. These nourish the tissues of the larynx, pharynx, and bronchi, which are all part of the lungs and respiratory system. The second type of circulation in the lungs is the flow of oxygen-depleted blood coming from the veins of the body via the right side of the heart to the lungs for re-oxygenation. From there it is sent back to the heart to be pumped throughout the body.

However, unlike other parts of the body it is the veins that carry oxygenated blood in the lungs, while the arteries carry the oxygen depleted blood. In addition, the blood flowing in the pulmonary arteries from the right side of the heart to the lungs is under less pressure than blood flowing in the arteries from the left side of the heart to the body, and therefore the pulmonary artery has a lower status than the pulmonary vein because its blood is under lower pressure and does not contain oxygen. Thus, even though Vinatā corresponds to a vein, she has a highly significant role in carrying oxygenated blood from the lungs back to the heart.

Dhṛitarāshtrī and Shukī correspond to the internal thoracic artery and the thyrocervical trunk respectively, which are involved in the first type of circulation mentioned above—the nourishment of the physical tissues of the lung.

Dhṛitarāshtrī and Shukī are Tāmrā's daughters, extending from the subclavian artery where Tāmrā is located. From one angle of perception, Vinatā can be considered to be in the line of Tāmrā, the subclavian artery, because she originates in the chest and upper arms. However, if we examine the physiological correspondence more closely, we see that Vinatā is actually involved in the second type of circulation, and thus has her own independent

status. She exists on the highest possible level, as a *Patnī* of Kashyap.

We have now resolved two apparent conflicts or paradoxes—we have seen that Dhṛitarāshtrī and Shukī can be viewed as sisters since they both come from the subclavian artery. At the same time, Dhṛitarāshtrī is the mother of Shukī because the internal thoracic artery comes before the thyrocervical trunk. Both perspectives are acceptable and the Vedic Literature provides both descriptions.

Secondly, we have resolved the paradox of Vinatā, who is the granddaughter of Shukī and the great-granddaughter of Tāmrā according to one perspective, but on the other hand she is the *Patnī* of Kashyap.

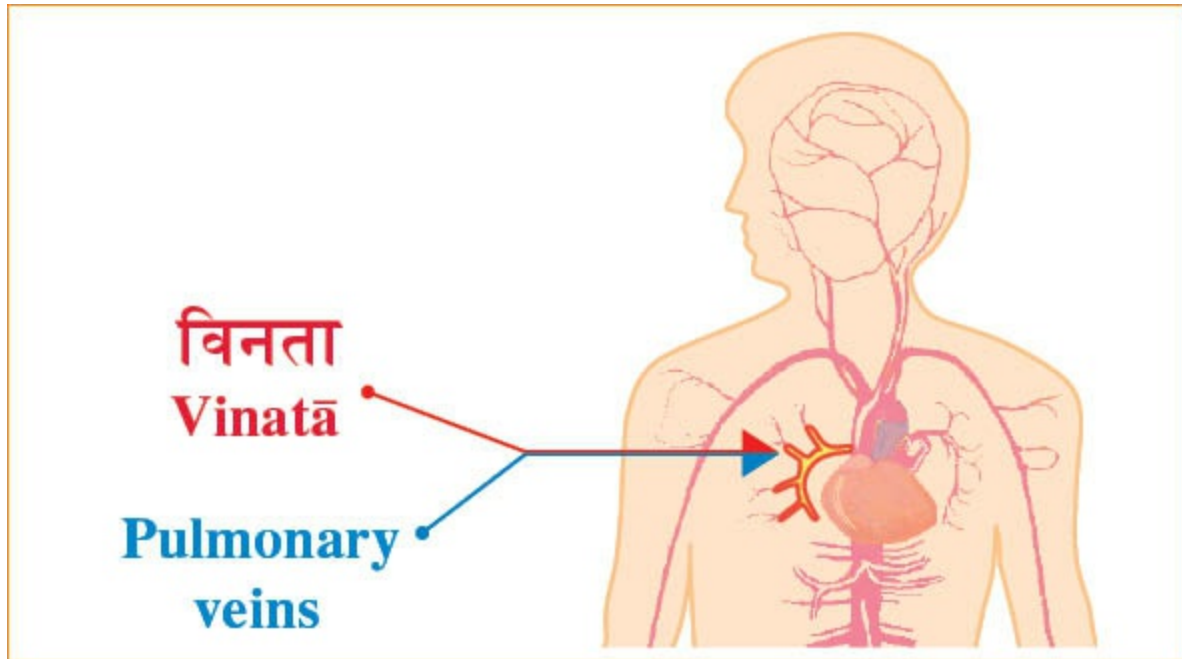
This is a fascinating illustration of the precision of the correlations, and how what seems contradictory is resolved. When I discussed these findings with Maharishi, he said, ‘Yes, now Natural Law can be seen, it can be touched’. We can have that experience by systematically examining these details. At first it may seem confusing, as there are so many names and relationships, but by taking the time to study them we begin to understand how the perfection of Natural Law is expressed in our own physiology.

### **Pulmonary Veins and Artery: Vinatā and Kadrū**

The Mahābhārat describes Vinatā and Kadrū as daughters of Daksha, who married Kashyap and gave birth to families of birds and serpents respectively.<sup>28</sup> Vinatā gave birth to the hawks and eagles, including her sons Garuda (the king of birds) and Aruṇa (the charioteer of Sūrya). She is thus the grandmother of Sampāti and Jatāyu.

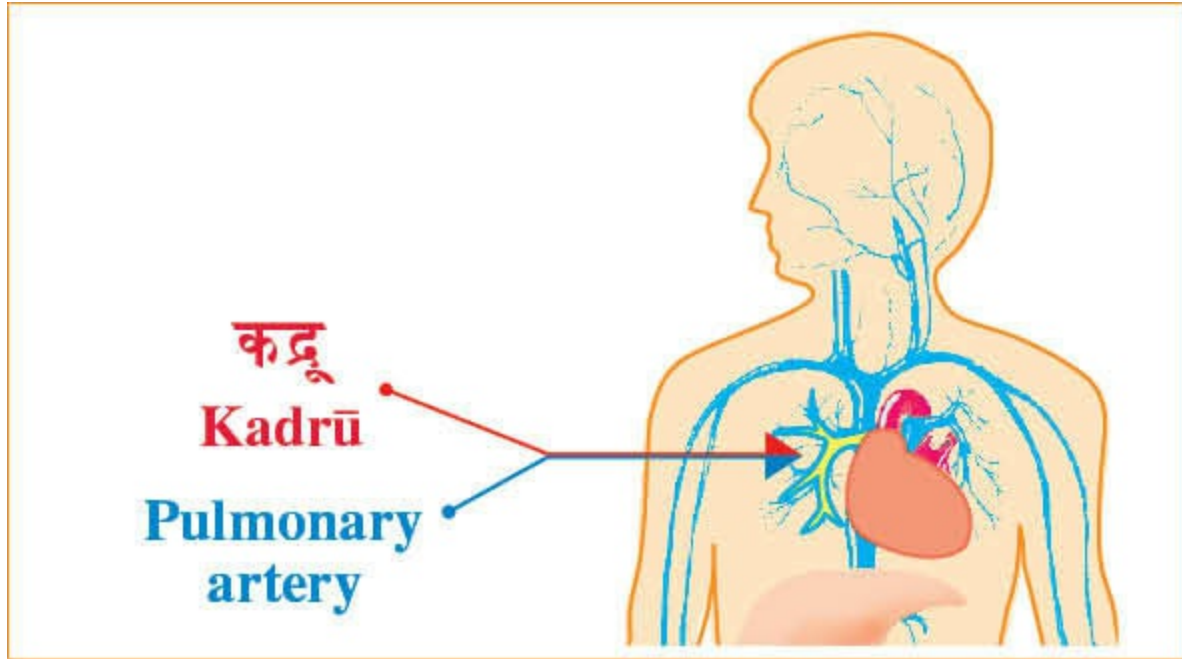
In the Rāmāyaṇ, however, Vinatā and Kadrū are not mentioned among the *Patnī* of Kashyap, but are described instead as the descendants of Tāmrā and Krodhavashā. In their place, Analā and Kālakā are listed as the *Patnī* of Kashyap.<sup>29</sup> How do we resolve this apparent contradiction?

Vinatā corresponds to the pulmonary veins and Kadrū is the pulmonary artery, which are parts of the second type of circulation occurring in the lungs that we mentioned earlier— their function is to oxygenate blood in the lungs for the entire body, but they do not provide nourishment to the lungs. They are therefore set apart from other arteries and veins in the normal circulatory system of the body.



**Figure 20.15 Vinatā, the mother of birds, corresponds to the pulmonary veins.**

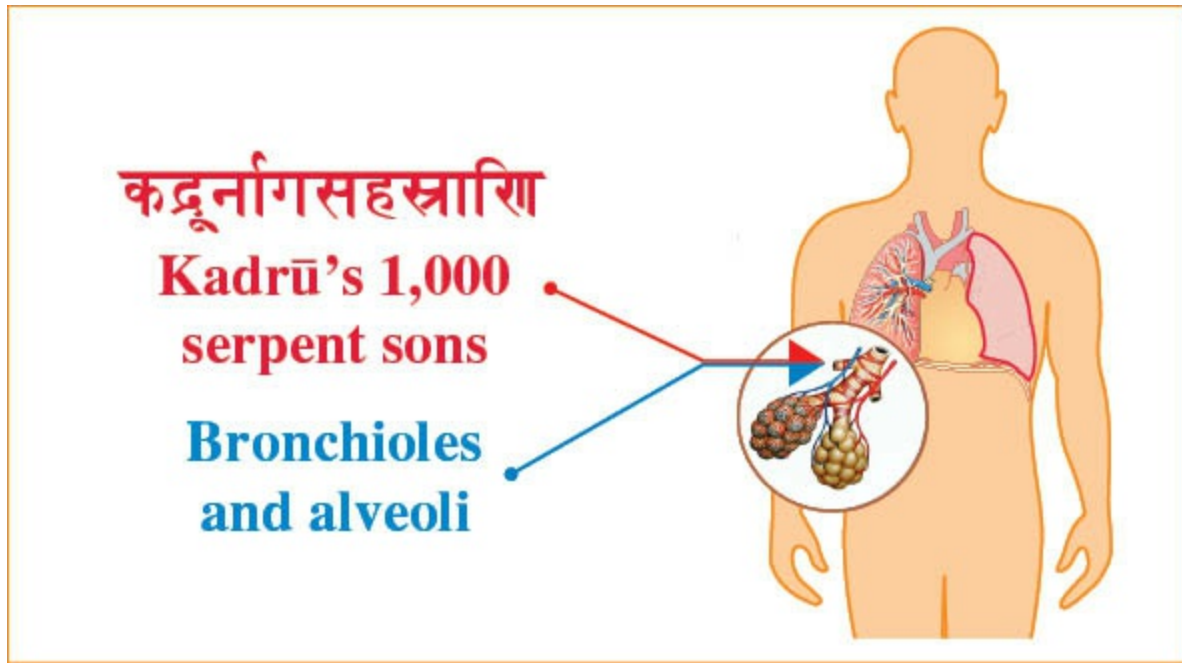
The Mahābhārat relates how Vinatā requested the birth of two excellent sons, whereas Kadrū requested the birth of 1,000 serpents. As a result, Kadrū received her 1,000 serpents and Vinatā bore Aruṇa and Garuda. Vinatā was impatient to see her sons and opened the first egg, from which Aruṇa arose, but because she had been impatient Aruṇa was not fully developed. For her impatience, Aruṇa cursed his mother to serve as Kadrū's servant until her next son, Garuda, released her from the curse. However, she had to wait another 1,000 years until the second egg, Garuda, hatched.



**Figure 20.16 Kadrū, the mother of serpents, corresponds to the pulmonary artery.**

Kadrū, the pulmonary artery, extends into the pulmonary tree and surrounds the bronchioles, the long air tubes that are the branches of the pulmonary tree. The bronchioles end in many small, rounded heads called alveoli that resemble serpents. Kadrū's 1,000 serpent sons correspond to many bronchioles and alveoli (1,000 is often used in the Vedic Literature to signify a large number).





**Figure 20.17 Kadrū's 1,000 serpent sons correspond to the bronchioles and alveoli of the lungs.**

The arteries are usually a high-pressure system, in which blood is pumped from the heart to the different parts of the body. The primary artery of the circulatory system is the aorta, Asiknī. The daughters of Asiknī who married Kashyap are the principal arteries branching off—e.g., Aditi, Diti, and Tāmrā. These arteries carry oxygenated blood from the heart to the tissues, where the oxygen and nutrition are removed. The oxygen-depleted blood is then collected by the low pressure venous system, which brings it back to the right side of the heart. The oxygen-depleted blood then leaves the heart through the pulmonary artery, which brings it to the lungs for oxygen. From there it returns through the pulmonary veins to the left heart. Vinatā corresponds to the pulmonary veins that collect the blood from the lungs and take it to the left heart. Veins are often the servants of the more powerful arteries, and in this circumstance we see Vinatā as the servant of Kadrū.

Vinatā was not a servant by nature—she was relegated to this status through a

curse. Since the pulmonary veins carry oxygenated blood Vinatā would in reality maintain a higher status than Kadrū, which unlike all other arteries carries deoxygenated blood.

This physiological state explains the relationship between Vinatā and Kadrū described in the Vedic Literature. As the mother of Garuda, the king of birds and the bearer of Vishṇu, Vinatā deserves the highest possible level of dignity in the family of birds, yet because of Aruṇa's curse she was a slave to Kadrū.

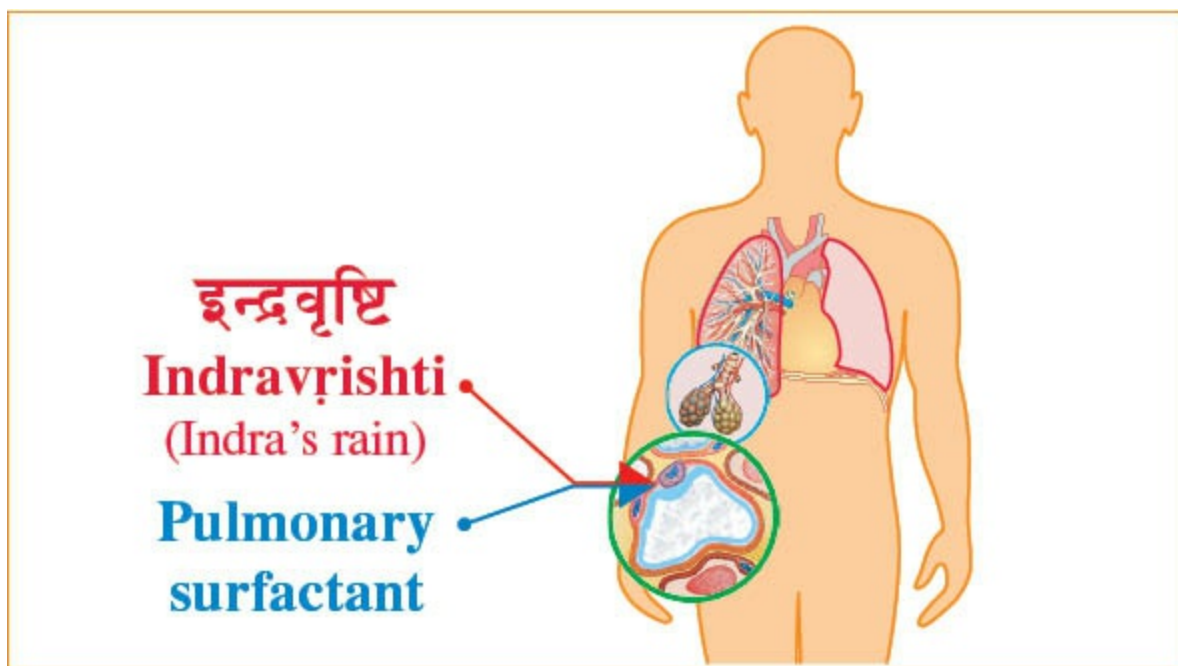
### **The Lungs: Garuda, the King of Birds**

Garuda is located in the lungs,<sup>30</sup> which are like his huge wings. In the centre of the lungs is the trachea, which resembles the body of a bird. The lungs are also the ultimate container of air within the human physiology, again relating to the movement of birds in the air.

The Mahābhārat describes how Garuda carried the serpent sons of Kadrū on his back in an attempt to secure his and his mother's freedom.<sup>31</sup> The sons of Kadrū, as we saw above, correspond to the bronchioles (figure 20.17), whose ends are sac-like structures called alveoli. These look like the serpents that Garuda carried. Like his mother Garuda was a slave, and even though he seemed to complain about his role he was not a slave in a negative sense. It is the role of the lungs to carry these 'serpents' within them, for the expansion of the lungs allows the bronchioles to fill with the air needed to oxygenate the blood—and the oxygenation of blood is one of the lungs' critical functions. The holistic value must carry the specific value, always enabling it to become holistic. Garuda is the king of the birds, carrying Wholeness in the form of Vishṇu, and from this perspective the serpents are an integral part of the play and display of creation.

The Mahābhārat recounts how Garuda carried the serpents too close to the Sun, causing them to be scorched and to collapse. When oxygen is consumed, the transmembrane pressure drops to a certain point and the alveoli tend to

collapse. The process of metabolism—the burning of oxygen that occurs in all cells of the body—corresponds to Garuda carrying the serpents too close to the Sun’s fire. The cause of the collapse is also a result of the lowering of pressure inside the alveoli, which corresponds to Garuda transporting them at too great a height, because pressure diminishes at higher altitudes. In the normal process of metabolism there is no danger since the lungs naturally expand again. The serpents were ultimately saved when Indra sent the rain called *Indravṛishti* (Indra’s rain).



**Figure 20.18** Indra’s rain, *Indravṛishti*, corresponds to the pulmonary surfactant.

The mechanism that prevents the alveoli from collapsing is a substance called pulmonary surfactant, which corresponds to Indra’s rain. A surfactant is a surface-acting fluid or chemical, which in the lungs keeps the alveoli open and counters their natural tendency to close. Thus the serpents always fall, corresponding to the tendency of the alveoli to collapse, and Garuda always saves them, corresponding to the prevention of collapse due to surfactant.

This is an ongoing cycle within our lungs.

There is also a special reflex that protects our lungs from collapsing, which also corresponds to the help provided by Indra. We have all experienced this reflex when we intentionally tried to hold our breath. It is impossible to hold the breath for too long because the reflex forces the lungs to expand when the body needs oxygen.

This mechanism is extremely important during sleep. If our head moves so that a pillow covers the nose and mouth, we do not suffocate because the reflex mechanism is automatic—we gasp and take a breath. So when the alveoli have a tendency to collapse as Garuda rises too high, there is a mechanism that always saves them, for they too are a part of the play and display of Natural Law.

### **Molecular Carrier Systems: Aruṇa, Jatāyu, and Sampāti**

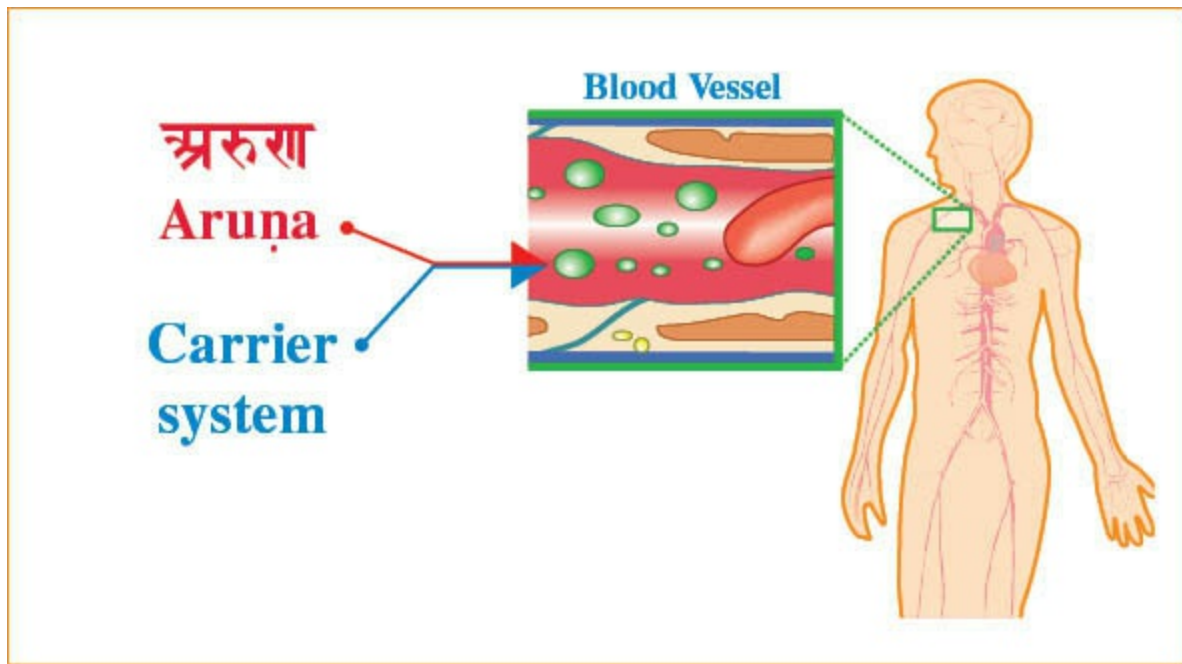
Aruṇa is the son of Vinatā, the mother of birds. Aruṇa emerged from the egg prior to his full development, which indicates that he does not correspond to a complete organ or system in the body, but rather to a partial quality that is nonetheless able to perform significant functions. This is the case of molecules that circulate in the blood—they are important factors, but they are not complete organs.

The blood transport systems are often proteins that carry specific molecules. The amino acids circulating in the body, and even various hormones, may be attached to carrier proteins. These protect the hormones from being destroyed by other enzymes or other circulating hormones. Thus there are two types of circulating proteins in the body, one that consists of messenger proteins and the other consisting of carrier proteins.

Messenger proteins, e.g., hormones, correspond to the *Vānara*, while carrier proteins correspond to the birds, both of which are found in the Rāmāyaṇ

jumping and flying everywhere.<sup>32</sup> The most obvious example is Hanumān, who flew through the air crossing large bodies of water, and even transported a mountain of herbs. Garuda, the carrier of Viṣṇu, is a transport system for the entire field of life.

Aruṇa thus fulfils the role of a carrier system. We also know that Aruṇa was the father of Sampāti and Jatāyu, and therefore Sampāti and Jatāyu belong to this special category of carrier proteins, since they too are birds and therefore carriers.<sup>33</sup>



**Figure 20.19 Aruṇa, a son of Vinatā, corresponds to the precursors of the molecular carrier system of the body.**

It is an important characteristic of Sampāti that in this part of the story he was unable to fly, thus identifying him as a fixed carrier system. At the same time, he possessed a remarkable ability to see very far in the distance, which represents the carrier systems' possession of receptors that enable them to detect objects from a far distance.

In this chapter we have considered the upper part of the body, including the

arms, neck, and upper chest. In the next chapter we will examine the chest itself, in particular the central portion of the thoracic cavity. This area contains the heart and its great blood vessels, and other structures such as the esophagus, trachea, thymus, and lymph nodes.

### ***Footnotes***

1. See Chapter XII, [The Meeting Between Rām and Jatāyu](#).
2. See [Chapter V](#).
3. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 76–88.
4. See Chapters [III](#) and [IV](#).
5. *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 376-377.
6. See [Chapter XVIII](#).
7. Shrīmad Devī Bhāgavatam, 9.39.
8. Shrīmad Devī Bhāgavatam, 9.39.
9. The name Lakshmī is a synonym of Ramā, and therefore also refers to the left part of the heart. In the common understanding of the heart, it is the left side that is predominant—the side that actually sends nourishment to the whole physiology. That is why Lakshmī is seen as the heart as a whole, whereas in reality the physical heart has two parts corresponding to Rādhā and Lakshmī (Ramā). Rādhā and Ramā preside over the activity of the right and left sides of the heart respectively, and together correspond to Sītā. There is a kind of gap that marks the junction between the right and left ventricle, called the anterior and the posterior interventricular sulcus, which corresponds to the ‘furrow’ quality of Sītā.
10. Shrīmad Devī Bhāgavatam, 9.39.
11. In the Upanishad we find that: *Purusha, the size of a thumb, is like a smokeless flame, the Lord of what has been and of what will be. Indeed, he exists today and will certainly exist tomorrow. This truly is That.*—Katha Upanishad 2.1.13 and *This Purusha...within the heart...*—Bṛihad-Āraṇyak Upanishad 5.6.1.



12. Maharishi explains that the three fundamental values of consciousness—knower, process of knowing and known (Ṛishi, Devatā, Chandhas)—can be detected in the pulse in the form of *Vāta*, *Pitta*, and *Kapha*, the three governing principles of the physiology. The name ‘pulse’ comes from the pulsating value of Transcendental Consciousness, between the silence of Unity and the dynamism of diversity of Ṛishi, Devatā, and Chandhas. Three values coexisting with Unity is a pulsating phenomenon in the self-interacting dynamics of consciousness (see [Chapter I](#)). With his three fingertips, the physician is able to detect to what degree consciousness pulsates in perfect balance with the dynamism of the body. In Maharishi’s words, ‘This field of pulse reading is a very complete field of knowledge of health, which is unavailable in the field of modern medicine’.

13. Shrīmad Devī Bhāgavatam 9.39.4.

14. *Human Physiology: Expression of Veda and the Vedic Literature*, p. 182.

15. Maharishi explains that the dynamics of consciousness knowing itself creates a whirlpool within its own structure, in which dynamism ‘collapses’ from infinite dynamism to a point (Ṛk) and the silence aspect of this infinite field ‘collapses’ into a point (Ak). This whirlpool within the dynamic structure of pure consciousness corresponds to the contraction and relaxation of the spiralling muscle fibres of the heart. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 50 ff.

16. The ten *Prajāpati* are the ‘Lords of created beings’ created by Brahmā: Marīchi, Atri, Angiras, Pulastya, Pulaha, Kratu, Vasishtha, Daksha, Bhṛigu, and Nārada.

17. It is important to learn the original, traditional names for all of the parts of the physiology. To use the sound vibrations of the proper Vedic Names will enhance health and strengthen the physiology, giving doctors greater power to heal, because the physiology will be understood as a living value of Natural Law rather than a mechanical structure consisting of isolated parts. Thus, rather than referring to the subclavian artery or the right common carotid artery, let us accord them their true names, which are Tāmṛā and Aditi respectively. This is one of the most important practical applications of the discovery of the relationship between the Rāmāyaṇ and human physiology.

18. In scientific terminology, *differentiation* means to ‘commit to a specific function’. An undifferentiated cell has not yet committed, and therefore still has the potential to develop into a brain cell, a kidney cell, a liver cell, etc. The primordial cells multiply and differentiate as a result of the inner intelligence of the DNA present within each of them, as well as through their interactions with their

environment. Gradually they become committed to a certain type of cell, such as a cell in the thalamus supporting the different activities of the brain.

Scientists often use terms that are ordinarily found in a social context. For example, when speaking about two branches in a tree a scientist might refer to one branch as the ‘sister’ of another branch, while the branch from which they both emerge might be referred to as their ‘mother’. Similarly, the trunk of all of the branches can be termed the ‘parent’ or ‘grandmother’ or ‘great-grandmother’ of the branches.

In the same way, the tree of arteries in our body is formed from one large branch, or trunk, which gives rise to smaller branches, which in turn generate even smaller branches, forming a hierarchy of the family of arteries. Thus, a surgeon might refer to a main branch as the ‘mother’ or ‘parent’ artery, and an offshoot as a ‘daughter’ artery.

19. See Chapter VI, textbox ‘[The Meaning of Family Relations in the Context of the Rāmāyaṇ](#)’.

20. It is imperative that a proper relationship be present in our correlations between the progeny of Asiknī—the progeny of the arterial system—and the structures with which they are associated in the Vedic Literature, particularly in the stories of the Rāmāyaṇ and Mahābhārat. This greatly limits flexibility in correlating an artery with a character. For example, we cannot say that Kausalyā and Kaikeyī correspond to arteries in the feet, as even though there might be a logical reason in the context of the genealogy, we would have to explain how they could be located in the feet while Dasharath, their husband and king, is located in the brain. Thus we have a scientific constraint placed upon our correlations—they must be consistent with all aspects of the Rāmāyaṇ. This is a significantly large task since there are hundreds of arteries and over 60 family members mentioned in the genealogy.

21. The ‘common’ of common carotid does not refer to anything that is common between the right and left side, but instead clarifies that it is common to both the external carotid and internal carotid, which later branch from it.

22. Some traditions hold that when circumambulating a Deity one should move in a clockwise direction, in order to avoid exposing one’s left side to the Deity—one should show only the right side. The reason is that Aditi is located on the right side, and it is therefore more respectful to expose the side of the *Devatās*, the *Āditya*, rather than the side of the *Daitya*.

This practice has been handed down for many generations, but today we are largely out of touch with Natural Law, and in the desire to be ‘scientific’ the tendency is to disregard such traditions as being

insignificant, even ridiculous, tokens of the past. This attitude is largely due to ignorance and the loss of knowledge of the value of Natural Law.

There are some principles that have outlived the understanding of society and we would be wise to respect and study tradition, rather than disrespecting or discarding it out of hand. In ignorance we damage the force of evolution and create friction, and friction causes wear and tear, stress, pain, and other problems. If we are violating Natural Law, the resulting problems are our own creation. If we are gaining support from Nature and feeling fulfilled, it means that our behaviour is in tune with Natural Law. Maintaining life-supporting traditions is important to the quality of our lives and to the whole of society, as well as to the nation and the world.

23. We will examine some of the progeny in this chapter and the remainder in Chapter XXI.

24. See Chapter VI, [King Dasharath](#).

25. See Chapter XII, [Garuda](#), [Jatāyu](#), and [Sampāti in the Physiology](#).

26. *Āraṇya Kāṇḍ*, 14.11–20.

27. *Āstika Parva* of the *Ādi Parva*, 16.

28. *Āstika Parva* of the *Ādi Parva*, 16.

29. *Āraṇya Kāṇḍ*, 14.17–22.

30. See Chapter XVI, [Garuda Awakens Rām and Lakshmaṇ](#).

31. *Āstika Parva* of the *Ādi Parva*, 25.

32. There are a number of characters in the Rāmāyaṇ who travel a great deal yet do not have their own kingdoms. Their field of activity is everywhere, serving everything. These correspond to birds and *Vānara* flying and jumping in all directions.

33. See Chapter XII, [Garuda](#), [Jatāyu](#), and [Sampāti in the Physiology](#).



# Chapter XXI

## The Genealogy of Creation

### Part 2

#### Arteries of the Chest<sup>1</sup>

**W**e have discussed how the ascending arch of the aorta emerges from the heart, moves in an upward direction, and then turns 180 degrees to travel downward to the mediastinum. From there it continues through the diaphragm into the abdominal area and down to the pelvis. Within the mediastinum, or chest area, the aorta is called the thoracic aorta, which distributes branches to various organs and structures in the mediastinum as well as to the lungs.

Branches that supply structures of a body wall, such as the chest or the abdomen, are called parietal, and those that supply the internal organs are called visceral arteries. Another basic category is segmental arteries, which support all the structures of a segment, the basic embryologic building block with its related vertebral body, ribs, muscles, nerves, and skin. Parietal arteries are usually segmental, in contrast to visceral arteries.<sup>2</sup>

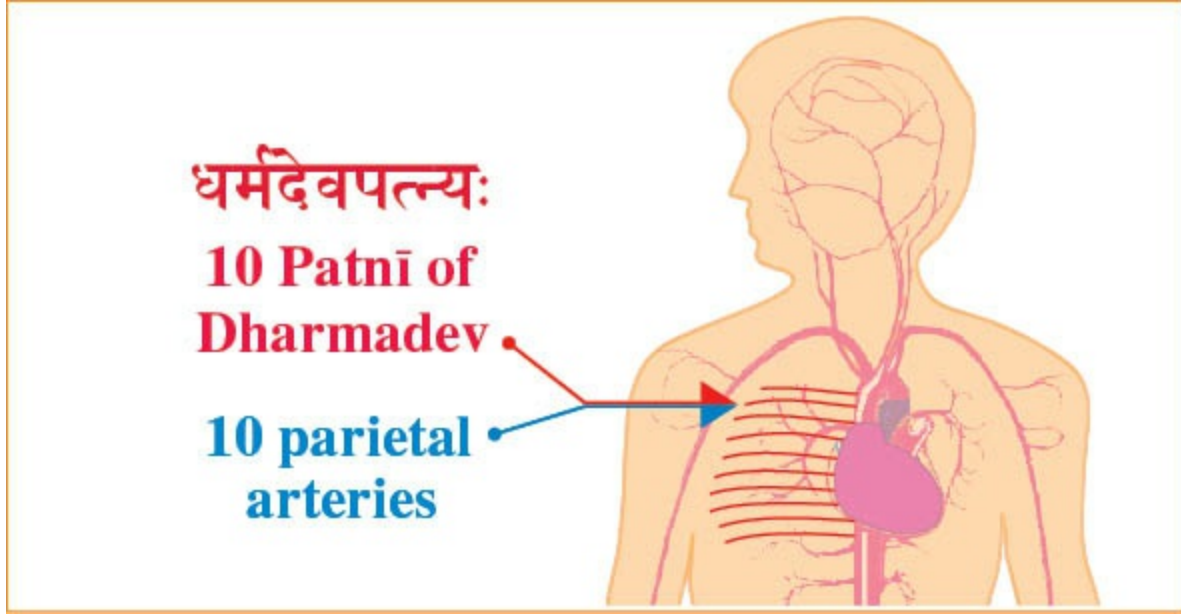
The visceral arteries of the thoracic aorta—for example the pericardial and bronchial arteries—supply the organs of the chest, such as the heart and lungs. The ten segmental parietal arteries of the thoracic aorta supply the skin, the muscles and bones of the rib cage, the vertebral column, as well as the spinal cord.

These ten parietal arteries are dual and symmetrical—they extend to both the right and left parts of the chest. Joining together at the back, they form the radicular branches, supplying nourishment to the vertebral column and to the spinal cord, which is part of the central nervous system. Near the spinal cord, the arteries form one long spinal artery that nourishes the entire spine.

The spinal cord and the brain are the seat of the different *Sūkta* of Ṛk Veda.<sup>3</sup> Information involved in perception and action is processed at the different levels of the spinal cord, and then is sent through nerve fibres that ascend to the brain and descend to the muscles and organs of the body.

### **Segmental Parietal Arteries of the Thoracic Aorta: The *Patnī* of Dharmadev**

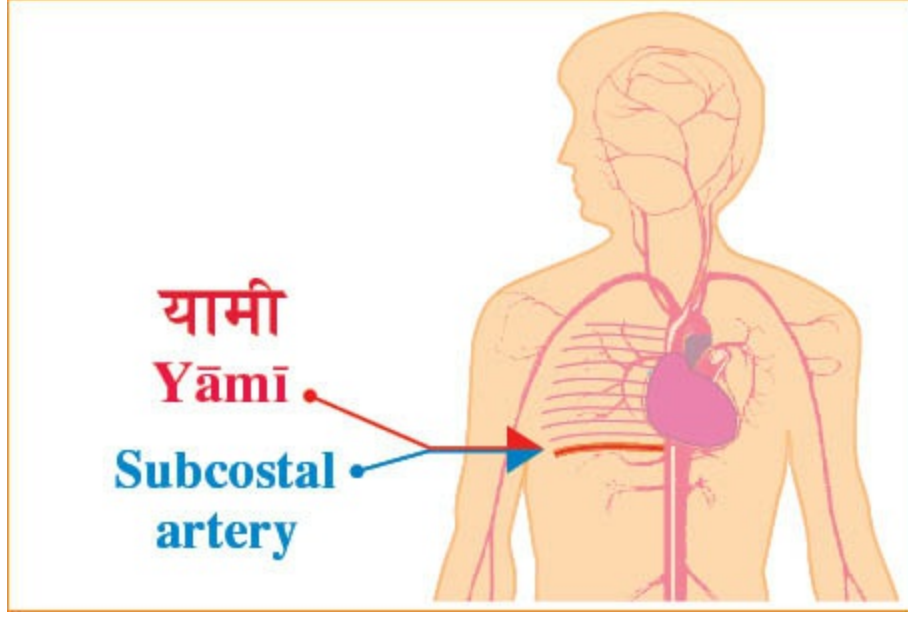
We may recall that Daksha and Asiknī had 60 daughters, ten of whom ‘married’ Dharmadev. *Dharma* refers to the Laws of Nature that uphold life in accord with Natural Law, and *Dev* signifies the *Devatā* quality, the administrative intelligence of the global administrators. Thus Dharmadev is the organizing intelligence of *Dharma*, the organizing intelligence of Natural Law. It is therefore natural that his *Patnī*<sup>4</sup> nourish the physical expression of Nature’s organizing intelligence. The ten daughters of Asiknī who ‘married’ Dharmadev correspond to the ten segmental parietal arteries that spring from the thoracic aorta (see [figure 21.1](#)).



**Figure 21.1** The 10 *Patnī* of Dharmadev correspond to the 10 parietal arteries of the thoracic aorta (note: only the arteries of one side are shown).

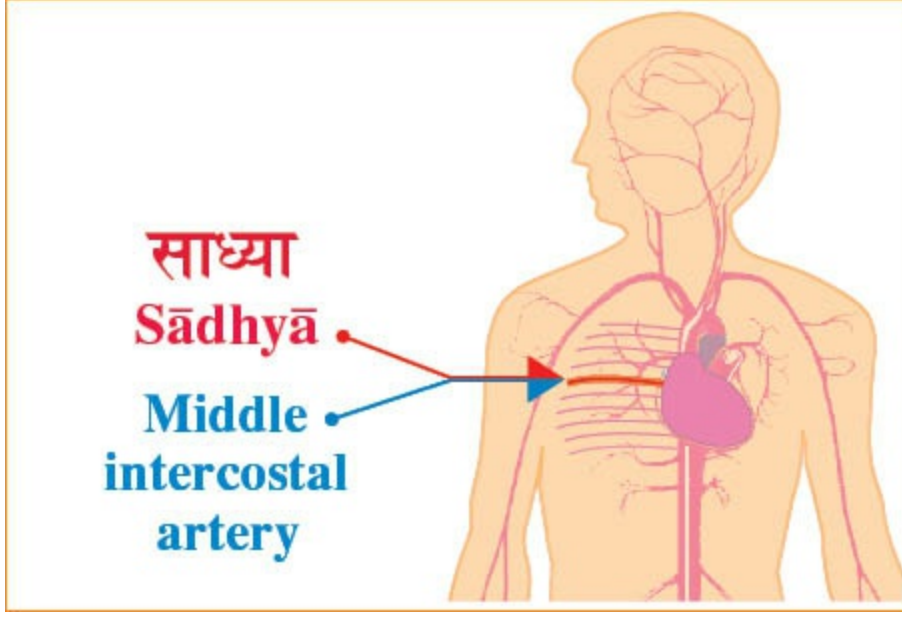
The hierarchy of these parietal arteries is as follows: the lowest is the subcostal artery, which is the most hidden of the ten, running below and along the twelfth rib. It corresponds to Yāmī, one of the *Patnī*. The other nine parietal arteries are the posterior intercostal arteries, which are positioned slightly higher. *Intercostal* means ‘between the ribs’, whereas *subcostal* means ‘below the ribs’.





**Figure 21.2 Yāmī corresponds to the subcostal artery.**

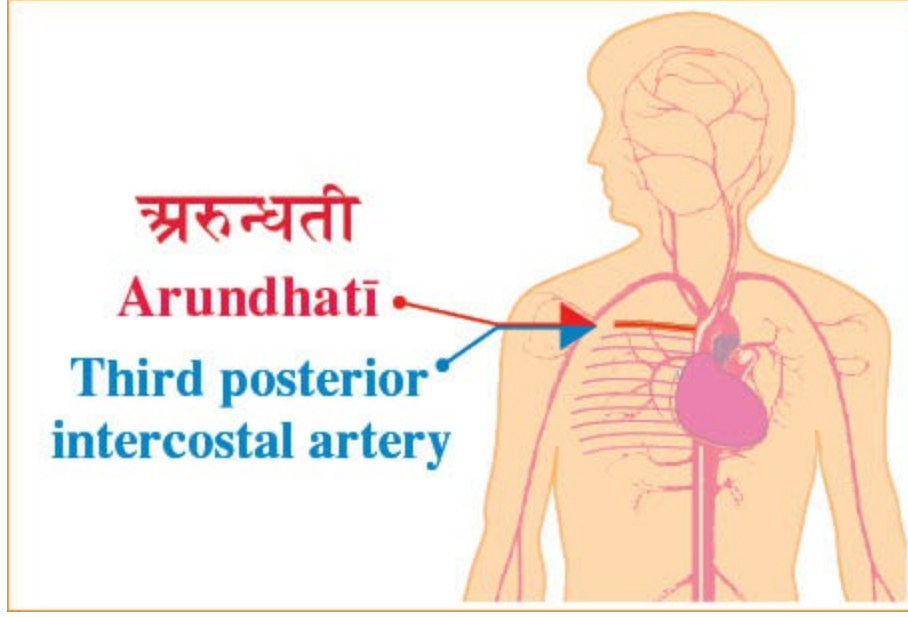
The fifth of the nine parietal arteries is called the middle intercostal artery. This is the seventh posterior intercostal artery and corresponds to Sādhyā. Sādhyā is described as the mother of the 12 *Sādhyās*, who are highly refined beings living in *Bhuvar-loka*, which is a heaven located between the Sun and *Bhūr-loka*, the Earth. This corresponds precisely with the location of the middle posterior intercostal artery.



**Figure 21.3 Sādhya corresponds to the middle intercostal artery.**

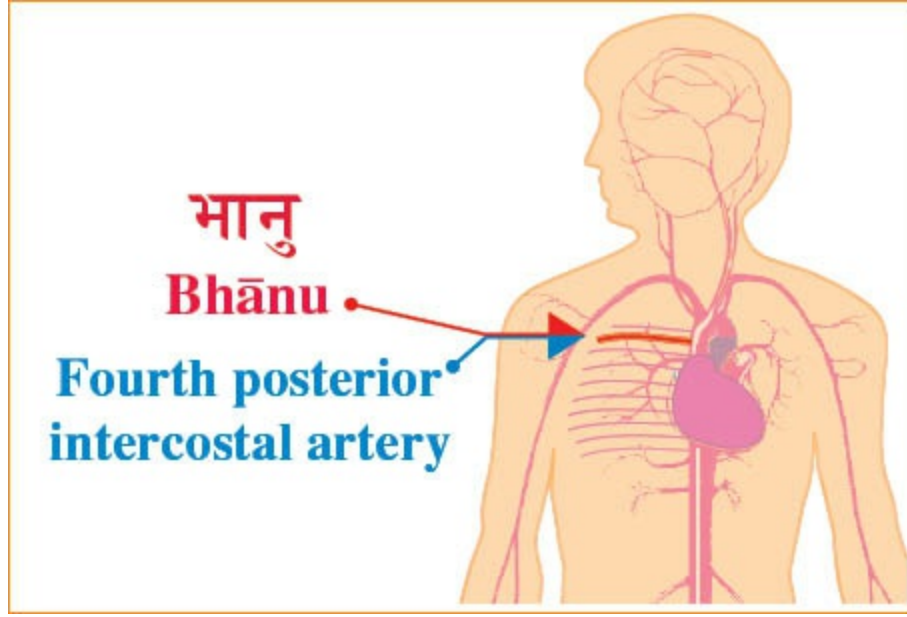
The middle of the nine arteries lies in the centre of the body, the thoracic area that lies between the Sun, or thalamus, and the Earth, which corresponds to the diaphragm and the region below. In the middle of the thoracic area (between the brain and abdomen) we find the middle posterior intercostal artery—Sādhya, the mother who feeds and nourishes the 12 *Sādhya*s. The 12 *Sādhya*s correspond to the 12 thoracic sections of the spinal cord.

The remaining *Patnī* of Dharmadev correspond to the surrounding posterior intercostal arteries in this region. They can be found in the following order: the first and highest of the parietal branches of the thoracic aorta is called the third posterior intercostal artery, and corresponds to Arundhatī. Arundhatī corresponds to one of the stars of the Great Bear constellation and sometimes to all seven stars, and thus can be considered the highest.



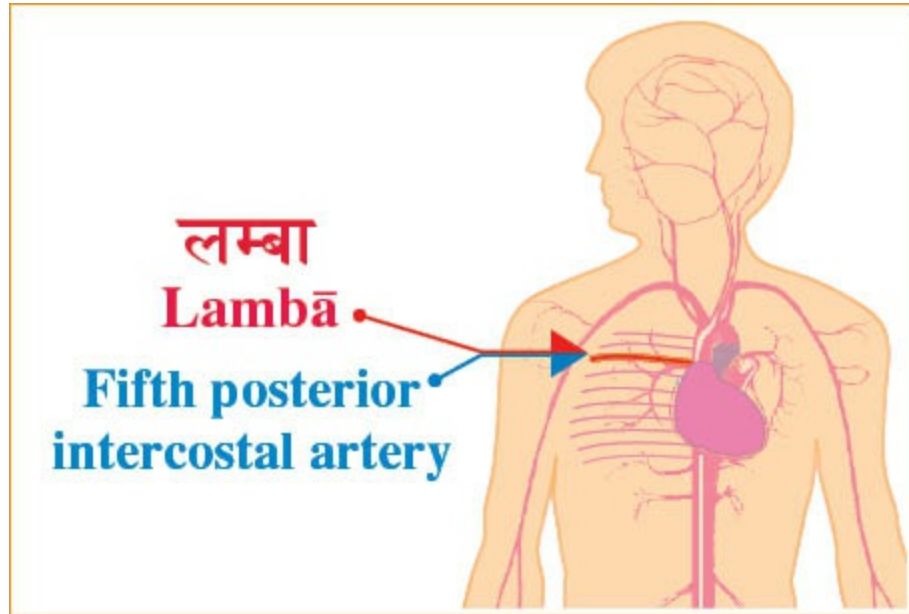
**Figure 21.4 Arundhatī corresponds to the third posterior intercostal artery.**

The second parietal branch of the thoracic aorta is called the fourth posterior intercostal artery, and corresponds to Bhānu. Bhānu means ‘light’ or ‘Sun’. Since the Sun is located below the stars, Bhānu lies below Arundhatī.



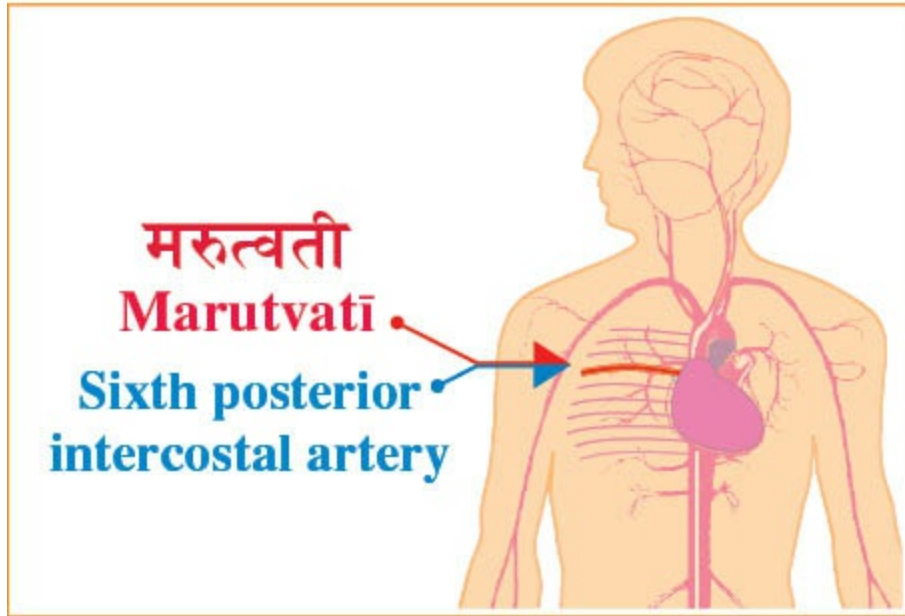
**Figure 21.5 Bhānu corresponds to the fourth posterior intercostal artery.**

The third parietal branch, or fifth posterior intercostal artery, corresponds to Lambā. *Lamba* can be translated as ‘perpendicular’, ‘hanging down’, ‘turned’ or ‘crooked’—all terms used in the Vedic Literature to describe her.



**Figure 21.6 Lambā corresponds to the fifth posterior intercostal artery.**

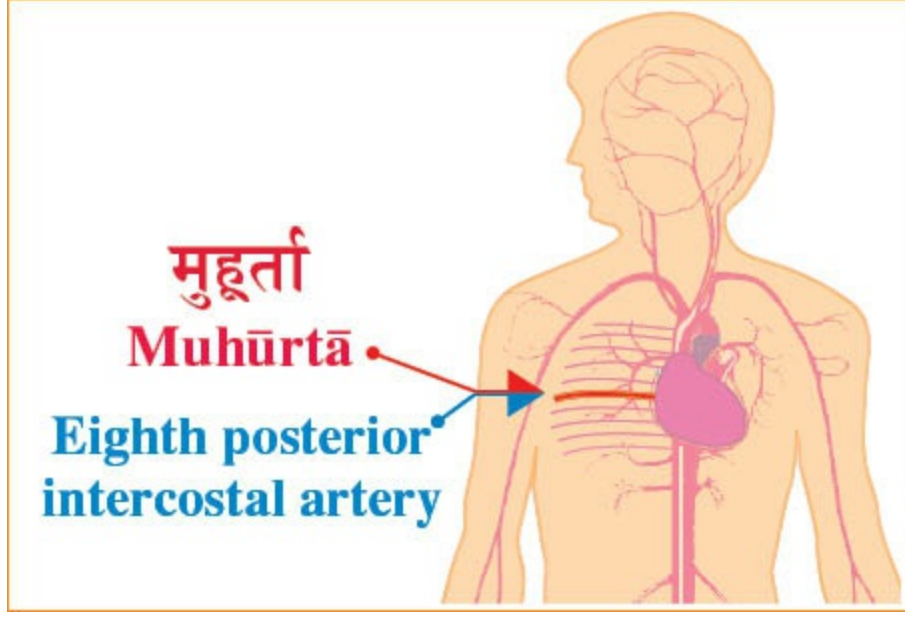
The fourth parietal branch, which is the sixth posterior intercostal artery, corresponds to Marutvatī. *Marutvatī* is derived from *Marut*, which means ‘wind, ‘breath’, or ‘air’. This is appropriate since the sixth posterior intercostal artery is located at the level of the lungs.



**Figure 21.7 Marutvatī corresponds to the sixth posterior intercostal artery.**

The fifth and middle branch, which we have already located, is the seventh posterior intercostal artery corresponding to Sādhya.

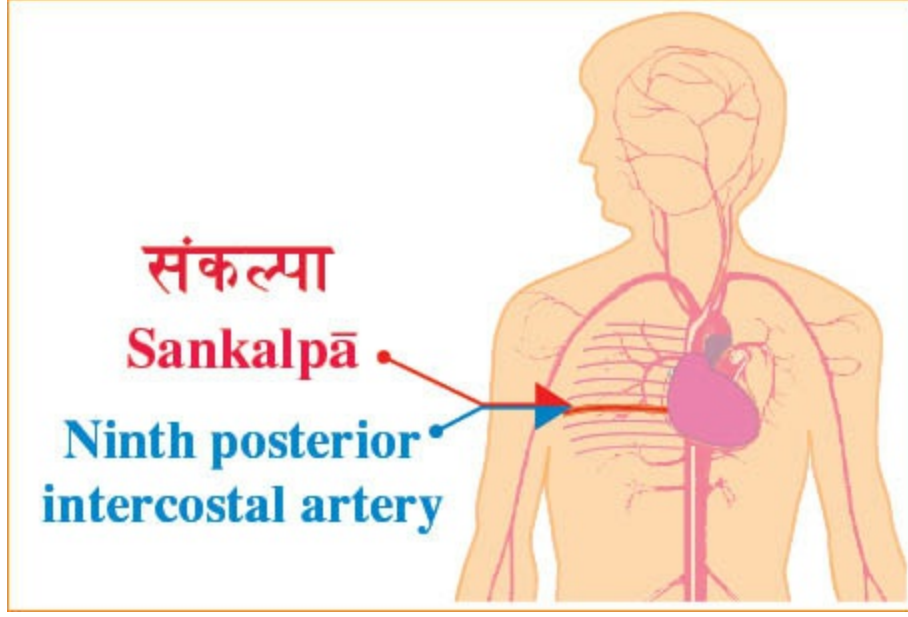
Next we have the sixth branch, which is the eighth posterior intercostal artery corresponding to Muhūrtā. *Muhūrtā* means an ‘instant’, or a ‘moment’, and also refers to a specific time period of approximately 48 minutes. This is the area in which we find the heart, which is appropriate since the beating of the heart punctuates and defines specific time periods.



**Figure 21.8 Muhūrtā corresponds to the eighth posterior intercostal artery.**

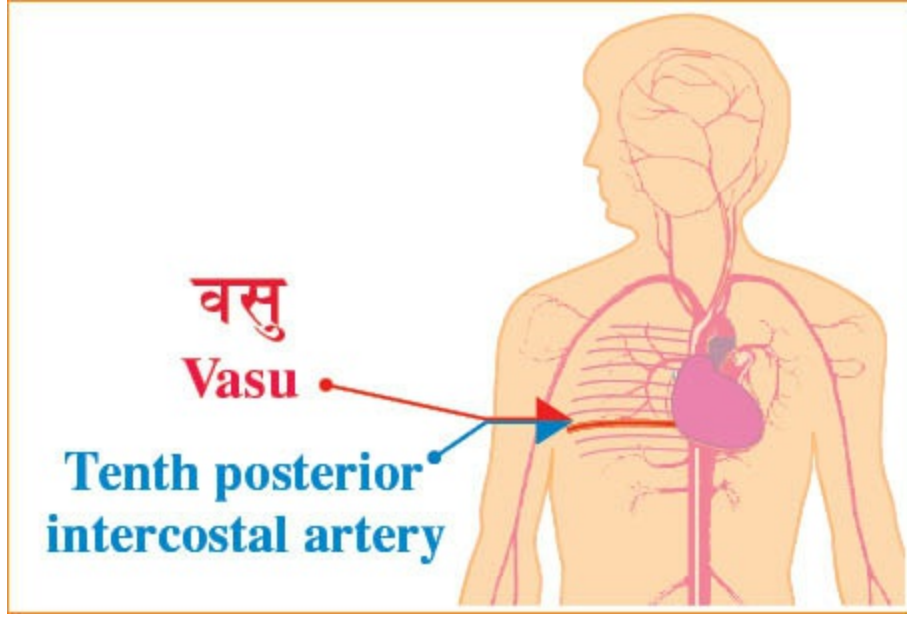
The seventh branch, and ninth posterior intercostal artery, corresponds to Sankalpā. *Sankalpa* means ‘desire’, or ‘an idea formed deep in the heart’—on the feeling level. Sankalpā, therefore, is also located in the area of the heart.





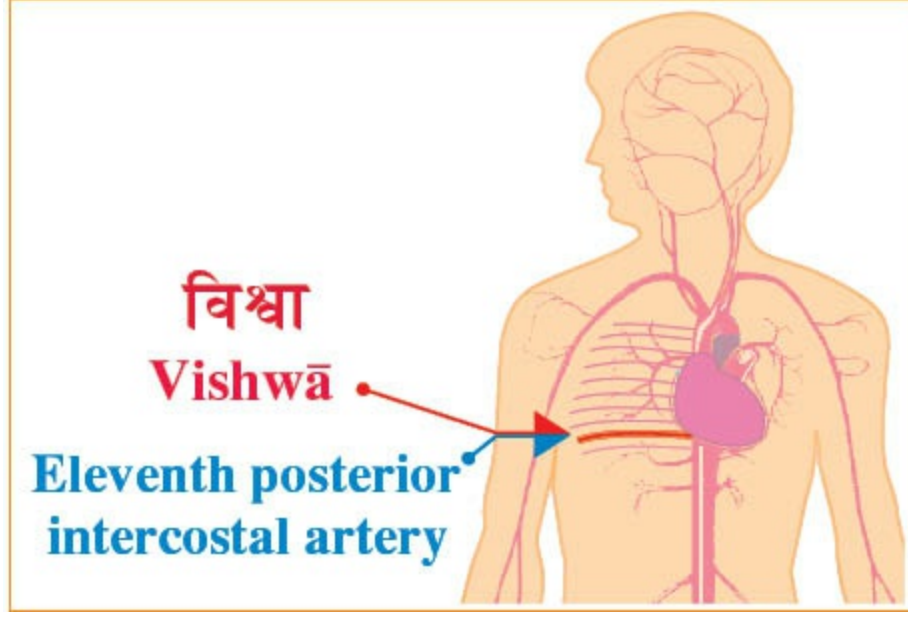
**Figure 21.9 Sankalpā corresponds to the ninth posterior intercostal artery.**

The eighth branch is the tenth posterior intercostal artery, which corresponds to Vasu. Vasu is the mother of the eight Vasus, who correspond to the elements of earth, fire, water, air, space, mind, intellect, and ego.



**Figure 21.10 Vasu corresponds to the tenth posterior intercostal artery.**

The ninth branch is the eleventh posterior intercostal artery corresponding to Vishwā. *Vishwa* means ‘all-pervading’, and also refers to the whole world and the entire universe. This is the branch that is nearest to the Earth, which corresponds to the diaphragm and the region below.

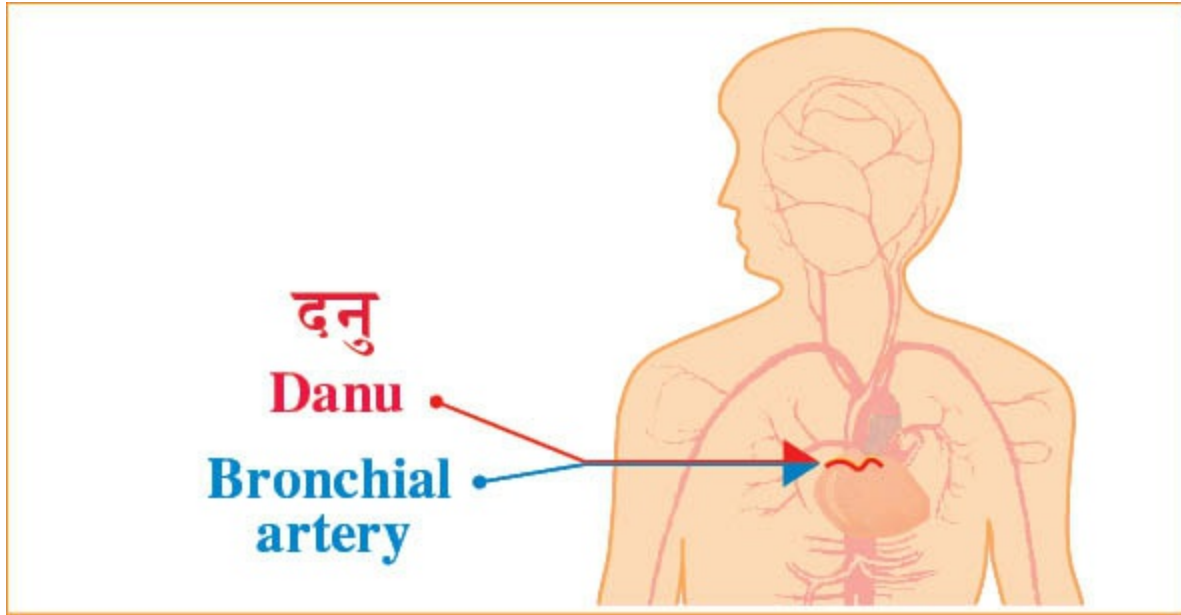


**Figure 21.11 Vishwā corresponds to the eleventh posterior intercostal artery.**

Yāmī is the tenth segmental parietal branch of the thoracic aorta, the subcostal artery, which corresponds to the Earth.

### **Non-segmental and Visceral Arteries of the Thoracic Aorta: The *Patnī* of Kashyap**

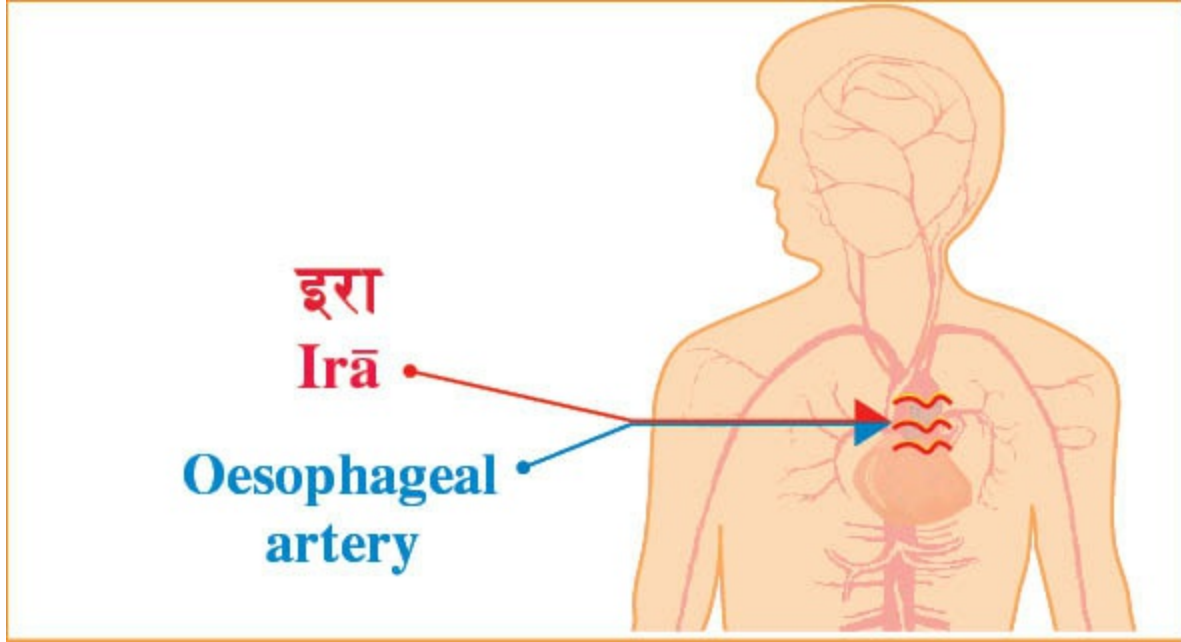
The visceral non-segmental arteries supply the organs present in the mediastinum, such as the heart, thymus, oesophagus, as well as those in the surrounding area, such as the lungs. The bronchial artery supplies the tissues of the lungs, but is not involved in the oxygenation of the blood, which is the concern of the pulmonary artery and pulmonary veins. The bronchial artery corresponds to Danu, who is one of the *Patnī* of Kashyap. The roots of the word *Danu* are *Da*—giving, *Na*—welfare, and *U*—*angīkāra*, which means having a body. Danu is therefore that which gives welfare to, or nourishes, the body. This relates to its location near the lungs, which are essential for providing oxygen to all the cells of the body.



**Figure 21.12 Danu corresponds to the bronchial artery.**

The next visceral arteries that we will consider are the oesophageal arteries, which vary in number in different individuals. Usually there are two or three—one main artery and two supportive arteries—which can have several branches. These supply the oesophagus, which is the structure inside the mediastinum that carries food and water into the stomach.

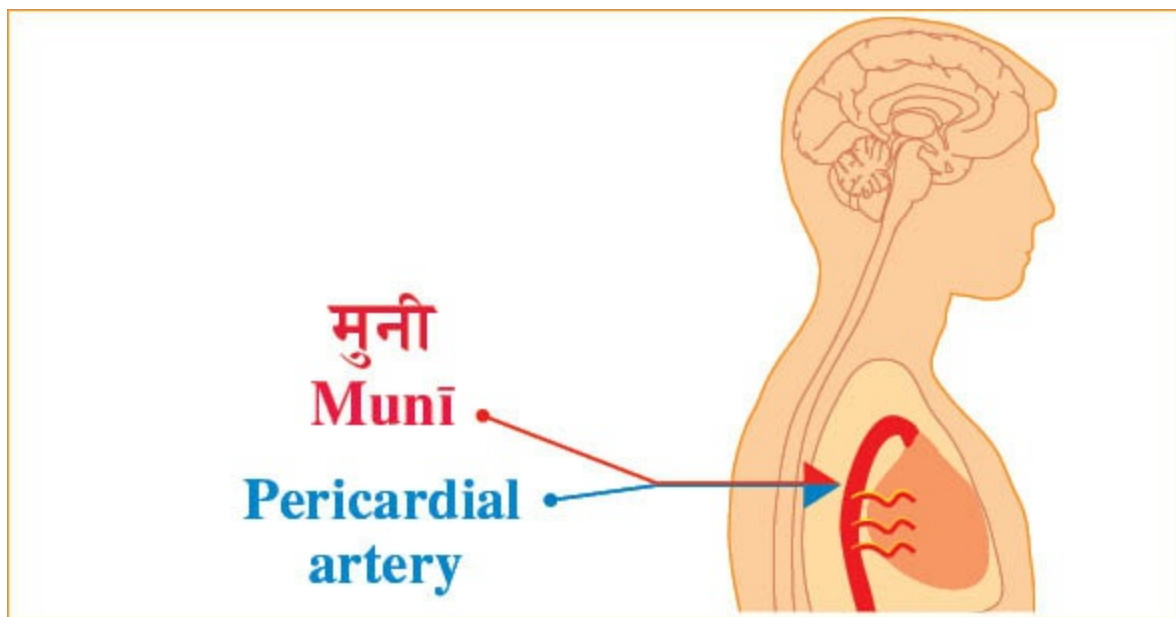
Kashyap's *Patnī* Irā corresponds to the oesophageal branches of the thoracic part of the aorta, and supplies the middle and main part of the oesophagus. *Irā* refers to 'drinkable fluids', 'food', 'refreshment', and 'enjoyment', in keeping with her location in the oesophageal artery.



**Figure 21.13 Irā corresponds to the oesophageal artery.**

The supportive oesophageal branches of the thoracic aorta contribute (through anastomoses) to the supply of the beginning and ending sections of the oesophagus, and are also therefore related to the passage of food and fluid within the oesophagus. These correspond to the two *Patnī* of Angiras, who is connected to watery areas, i.e., the oesophagus, larynx, and particularly to the pharynx,<sup>5</sup> and is present in the nuclei of the seven brainstem columns. These nuclei send out the cranial nerves that support this area (the oesophagus, pharynx, and larynx), so it is natural that Angiras' *Patnī* uphold this particular aspect of physiological function.

The next artery is the pericardial artery, which supplies the tissues that surround, cover, and protect the heart. Munī is a *Patnī* of Kashyap and the mother of the *Gandharvas* and the *Apsaras*, and corresponds to the pericardial artery. The word 'Muni', from which Munī is derived, comes from the Sanskrit root *Man*, which not only means to think, but to 'set the heart on', 'to hope or wish for', and to 'honour' or 'esteem'.

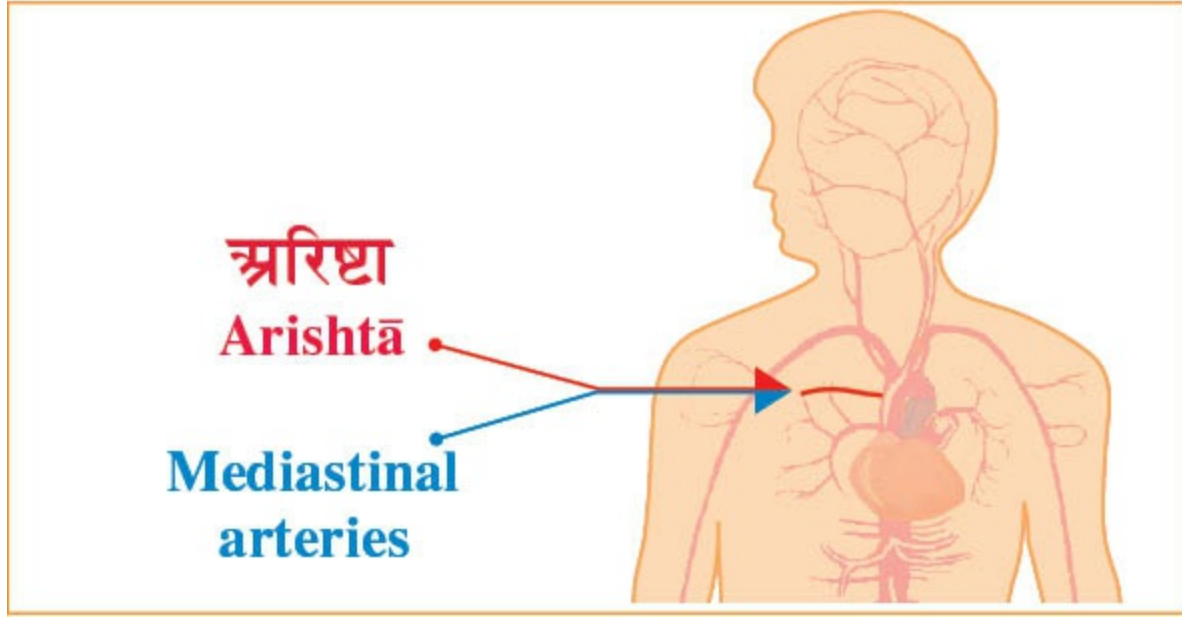


**Figure 21.14 Munī corresponds to the pericardial artery.**

Whenever we speak of ‘being human’ we generally associate this concept with feelings of the heart—a person who ‘isn’t human’ or ‘is inhumane’ is not exhibiting feelings of warmth, compassion, or love, and therefore does not possess the unifying value of Natural Law that is characterized by tolerance, acceptance, and patience. ‘Humanity’ implies the reality of being human, while ‘human’ implies the presence of certain feelings and qualities of the heart. This is the logical basis for correlating Kashyap’s *Patnī* Munī with the pericardial artery, which supports the covering of the heart. The heart sits just above the diaphragm, which corresponds to the beginning of the area representing the Earth, where humanity lives.

The next arteries we will consider support the mediastinum area directly, and supply many different tissues inside the chest. These include the mediastinal arteries, which correspond to Kashyap’s *Patnī* Arishtā. Arishtā is the mother of the *Gandharvas*, who correspond to the ganglia around the heart. These ganglia play a vital role in the modulation of the heart rhythm.<sup>6</sup>

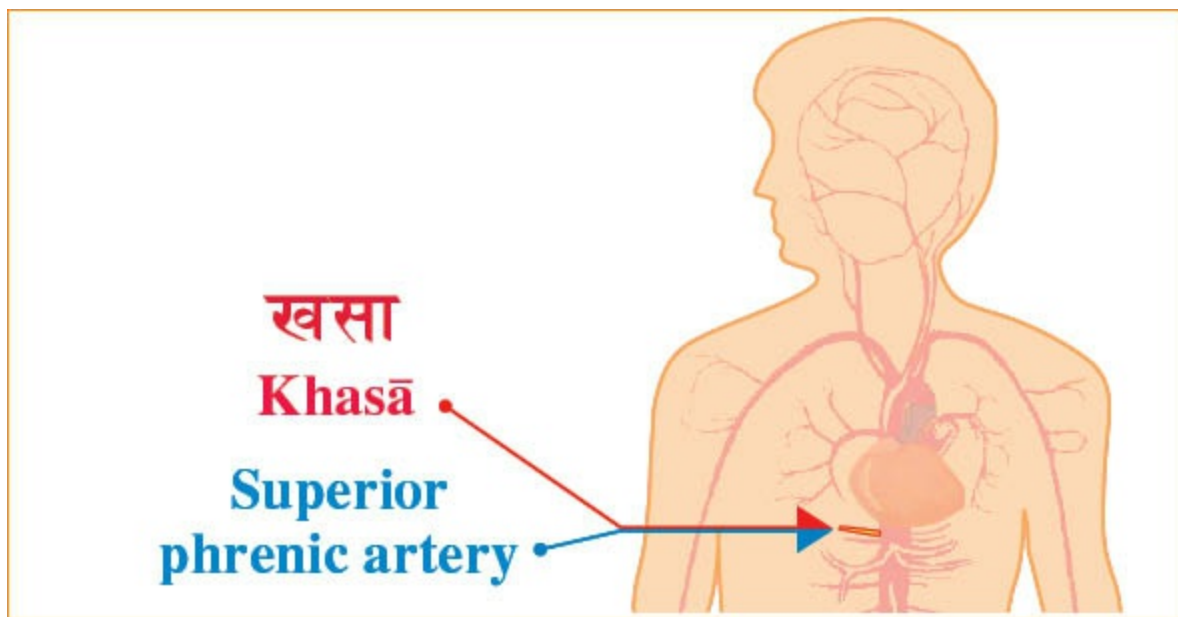




**Figure 21.15 Arishtā corresponds to the mediastinal arteries.**

The supportive mediastinal branches of the aorta correspond to the *Patnī* of Arishtanemi. According to the Mahābhārat, Arishtanemi is the son of Vinatā,<sup>7</sup> who as the pulmonary veins<sup>8</sup> plays an important role in the lungs. Arishtanemi was married to several daughters of Asiknī, which means that he is connected with the arterial branches emerging from the aorta. The names of Arishtanemi's *Patnī* are not mentioned in the Vedic texts, and these branches are only small arteries varying in number.

The last artery coming from the thoracic aorta is the superior phrenic artery, a non-segmental parietal artery, which supplies the diaphragm. The diaphragm, as we have seen, corresponds to the dome-shaped boundary of the Earth. The superior phrenic artery corresponds to Khasā. The word 'khasā' is related to the skin as well as to a particular location (along with its citizens) in the northeast portion of the Earth. The diaphragm can be thought of as a kind of inner skin, and its location in the body corresponds to the area of Khasā. Thus the correspondence between the superior phrenic artery and Khasā is appropriate.



**Figure 21.16 Khasā corresponds to the superior phrenic artery.**

### **Arteries of the Abdominal Area and the Lower Parts of the Body**

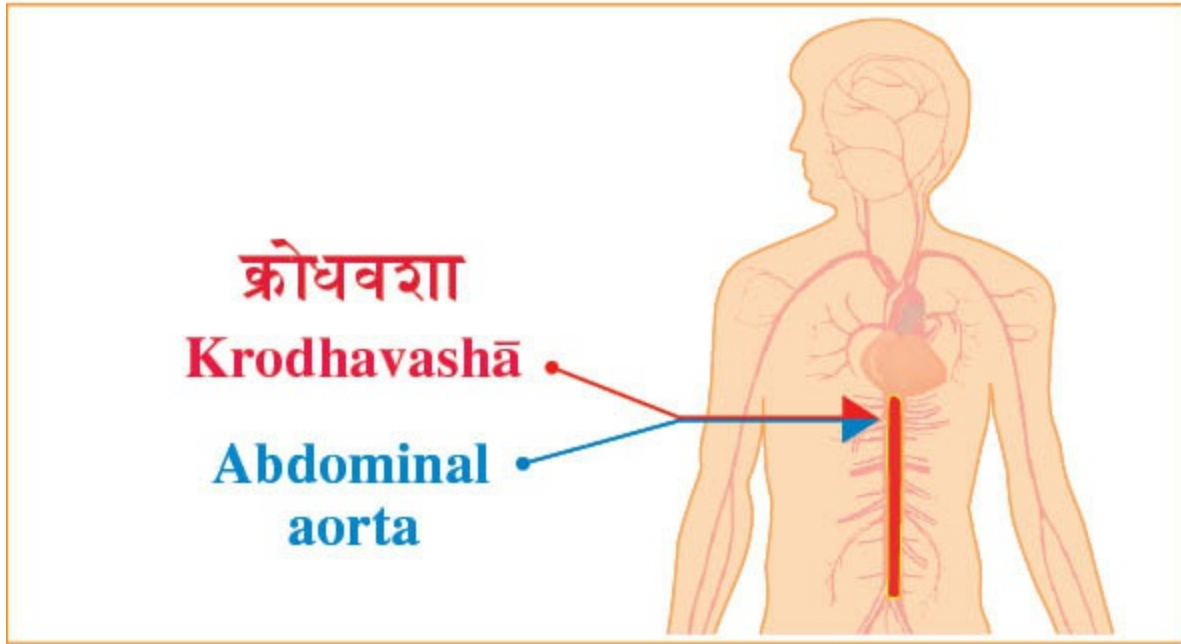
Asiknī, as we have seen, corresponds to the aorta. All the main arteries emerge from the aorta, which is the main trunk artery of the entire circulatory system. They then branch and bifurcate to become small arteries and arterioles. Eventually the arterioles become tiny capillaries, extending throughout the body. This ‘tree’ created by the bifurcations of the offshoots of the aorta corresponds to the different families of Asiknī’s descendants.

We have discussed the arteries coming from the aorta in the thoracic or chest area, and we have also associated the *Patnī* of Kashyap with each artery branching from the aorta, considering their main distribution, function, and in some cases their branches and bifurcations.

We have also examined the head area where the *Devatās* are found, the brainstem and neck areas in which the *Rishis* are located, and the upper extremities and chest area, where the birds are situated. We can say that these are all located above the Earth, which corresponds to the diaphragm and

abdominal area.<sup>9</sup>

Let us now consider the arteries that travel to the lower parts of the body, specifically the abdominal area. When the aorta passes through the diaphragm it is called the abdominal aorta, which corresponds to Krodhavashā, a daughter of Daksha married to Kashyap. We are told that Krodhavashā is the progenitor of the animal kingdom, with each of her ten daughters bringing forth a different species, including reptiles, elephants, *Vānara*, cattle, horses, etc.



**Figure 21.17 Krodhavashā corresponds to the abdominal aorta.**

In our description of the major divisions of the physiology, the abdominal area, nourished by Krodhavashā, corresponds to the inside of the Earth. Naturally animals live both on the Earth and to some extent in the Earth—many live in caves and some reptiles, animals, and insects live beneath the ground. These creatures too belong to the Earth, which explains why the inner abdominal area corresponds entirely to animals, and thus to Krodhavashā and her descendants.

As we consider Krodhavashā's descendants in the Vedic Literature, we find several seeming inconsistencies. For example, Surasā and Surabhī are described as her daughters in the Rāmāyaṇ,<sup>10</sup> but in the Shrīmad Bhāgavat Mahāpurāṇ they are said to be daughters of Daksha married to Kashyap.<sup>11</sup> Furthermore, we also see that two of the daughters of Daksha and Asiknī—Kālakā and Analā—are not always mentioned among the daughters of Daksha married to Kashyap.<sup>12</sup> Naturally we must investigate whether or not these seeming contradictions can be reconciled physiologically.

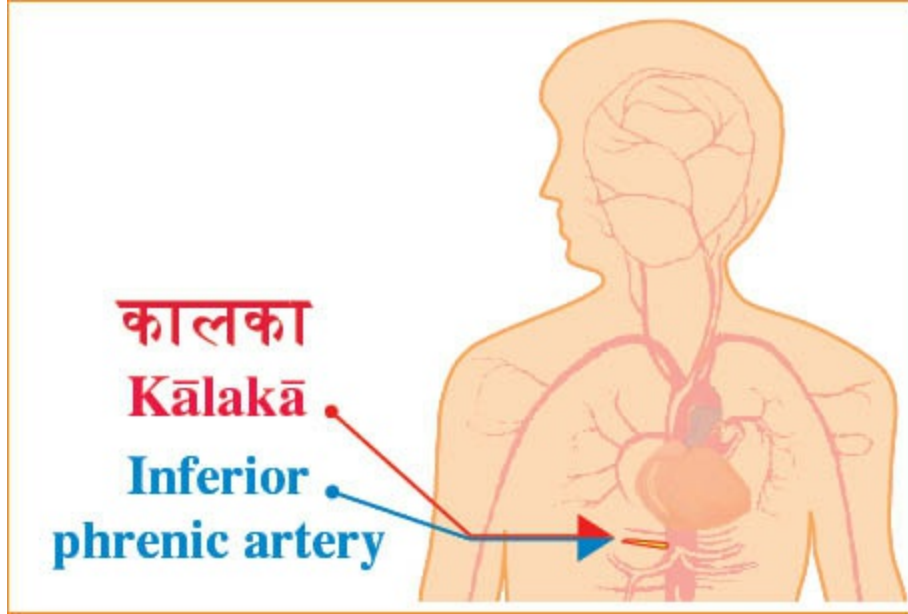
One of the first arteries emerging from the aorta at the level of the abdomen is called the inferior phrenic artery. We have already described the superior phrenic artery located on the top of the wall of the diaphragm, which corresponds to Khasā. We also saw that the word khasā refers to a specific area of the Earth that corresponds to the diaphragm. The superior and inferior phrenic arteries belong to the lateral, paired, non-segmental parietal arteries. The inferior phrenic artery is equal to the superior phrenic artery in the sense that both supply the diaphragm, but the inferior phrenic artery supplies the diaphragm from below and has a variable origin. In some individuals it emerges directly from the aorta (Asiknī), while in others, who are equally normal and healthy, it can emerge from the celiac trunk, the first major branch of the abdominal aorta (Krodhavashā). Thus we see that in one part of the Vedic Literature Kālakā is the daughter of Asiknī and in another she is the daughter of Krodhavashā.

We can understand one aspect of the relationship between Kālakā and the inferior phrenic artery by examining her name. Kālakā consists of *kāla*, 'time', along with *ka*, which means 'air', and *ā*, 'accumulation'. This makes it clear that Kālakā is associated with the process of breathing, and therefore with the diaphragm, which moves with each breath. As we shall see, she is also associated with the concept of time, as her name implies.

When we take in a breath of air, the diaphragm flattens. As it flattens it pulls down, opening up the chest cavity in a manner that is similar to a hand-held

bicycle pump when the handle is pulled up and the air drawn in. The diaphragm thus plays an important role in breathing. Indeed, newborn and small children breathe by means of the diaphragm and not by means of the intercostal muscles of the chest, and singers and actors are often taught how to breathe with the diaphragm because it is more efficient and liberates tension from the chest wall, thus permitting the full creation of sound.

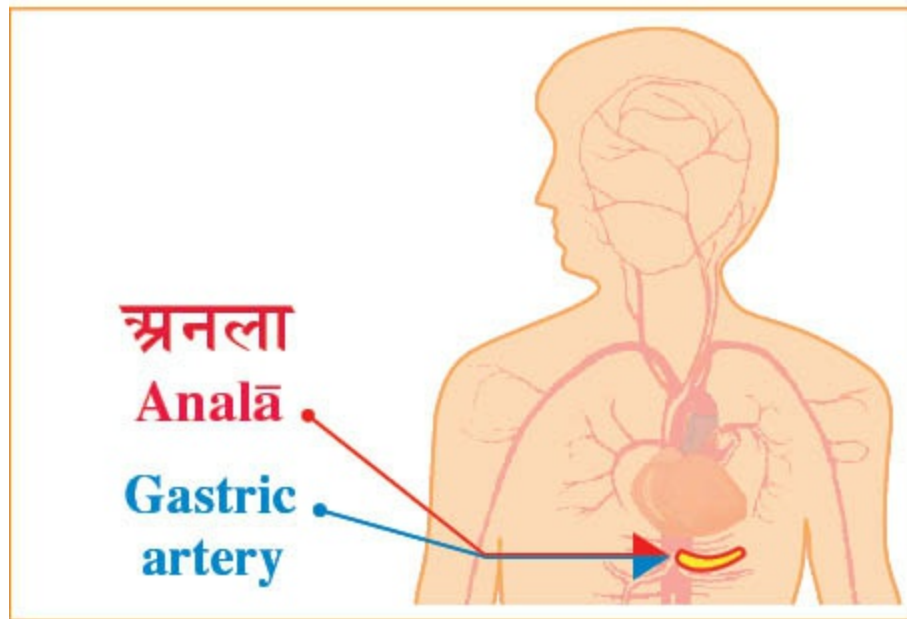
Breathing is often mentioned in the context of life span, such that the length of life can be calculated on the basis of how many breaths one is allotted. So we see that time is intimately connected on the physiological level with the breath rate, which involves the diaphragm, and it is therefore appropriate for the artery that feeds the diaphragm to be associated with time.



**Figure 21.18 Kālakā corresponds to the inferior phrenic artery.**

The gastric artery, a small artery supplying the stomach, is also present at this level, and corresponds to Analā. The Sanskrit word *anala* means digestive power and refers to the gastric juices. As we have mentioned, in the Rāmāyaṇ Analā and Kālakā are the daughters of Asiknī and Daksha and the *Patnī* of Kashyap, whereas in other aspects of the Vedic Literature they are the daughters of Krodhavashā. This seeming contradiction is resolved by

examining the anatomy of the artery as it emerges from the main trunk at the point where the aorta enters the diaphragm. Like the inferior phrenic artery, it is a special anatomical situation, because the gastric artery can sometimes be considered a direct offshoot of the aorta, while at other times an extension of the celiac trunk, a short branch of the abdominal aorta that branches immediately into the left gastric artery, the common hepatic artery, and the splenic artery.



**Figure 21.19 Analā corresponds to the gastric artery.**

### **Non-segmental and Visceral Arteries of the Abdominal Aorta: Daughters of Krodhavashā**

Let us now consider the abdominal arteries, which emerge from the aorta. These are the daughters of Krodhavashā, who correspond to the abdominal aorta.

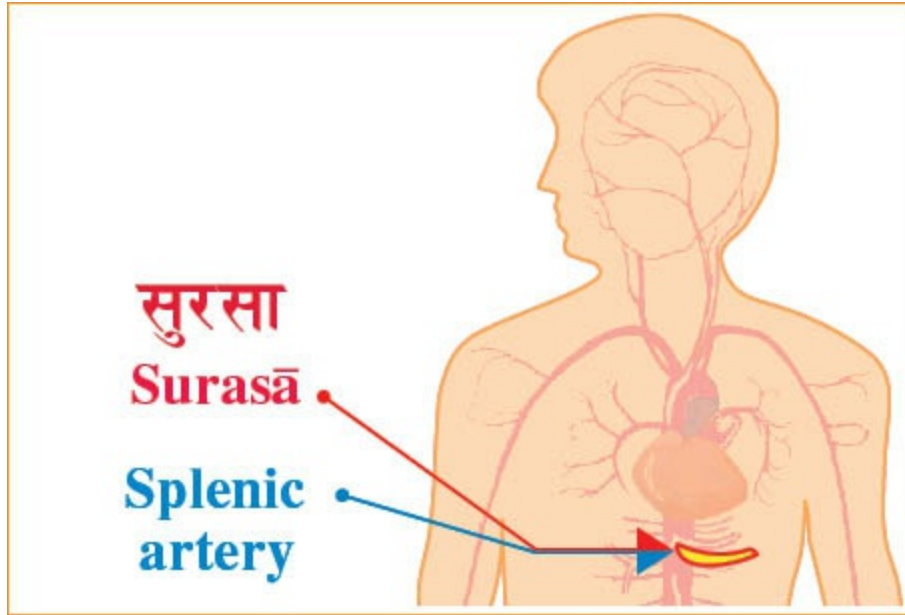
The first large artery coming out of the aorta in the abdomen is the celiac trunk. It appears to be an extension of the aorta because unlike most other arteries—which are usually dual or symmetrical, giving off one branch to the



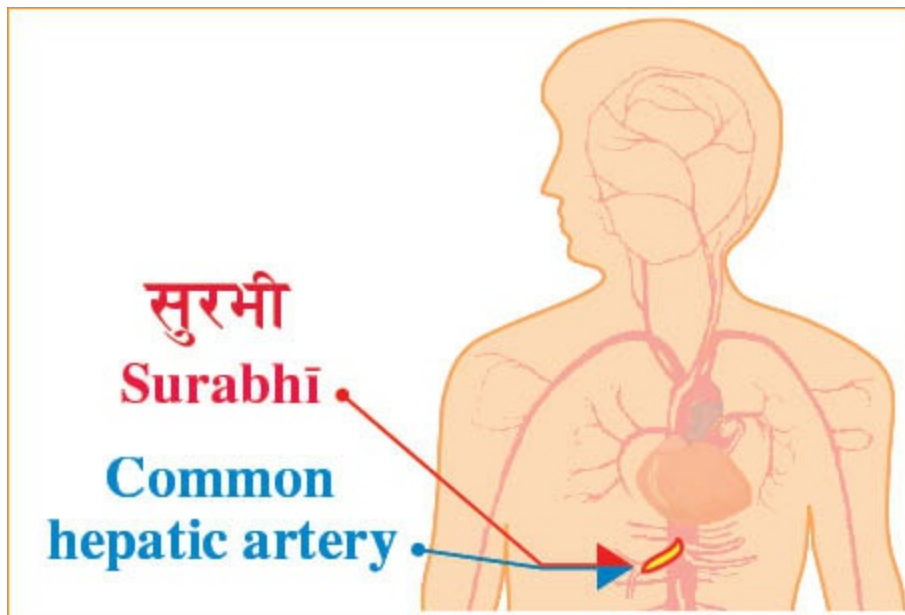
right and another to the left—the celiac artery is a single artery, one large trunk from which three arteries emerge. These three are the gastric artery, associated with Analā, and the splenic and common hepatic arteries.

The splenic artery supplies the splenic area of the body, i.e., the spleen and part of the stomach, and the coverings of the left side of the abdomen. The common hepatic artery gives off two branches, the most important of which is called the proper hepatic artery, which goes to the liver and the biliary vesicle. The second branch is the gastroduodenal artery, which covers a number of structures, particularly the upper intestinal tract and the pancreas, which secretes insulin and other hormones and enzymes.

These are the first arteries we have considered that are fully abdominal, coming directly from the point where the aorta, Asiknī, meets and becomes the abdominal aorta, Krodhavashā. The splenic and common hepatic arteries correspond to two daughters of Krodhavashā, Surasā and Surabhī. We saw earlier that the Shrīmad Bhāgavat Mahāpurāṇ cites Surasā and Surabhī as daughters of Daksha who married Kashyap, whereas the Rāmāyaṇ describes them as daughters of Krodhavashā. These are complementary descriptions, because on this level the abdominal aorta, Krodhavashā, and the aorta, Asiknī, are practically the same. The junction point from which these arteries emerge is the location where Asiknī becomes the abdominal aorta, Krodhavashā. The abdominal aorta is, in fact, an extension of Asiknī as it enters the abdominal cavity. Are the arteries that branch off at that junction point the daughters of Krodhavashā or are they the daughters of Asiknī? We can take either point of view, because both are completely correct.



**Figure 21.20 Surasā corresponds to the splenic artery.**



**Figure 21.21 Surabhī corresponds to the common hepatic artery.**

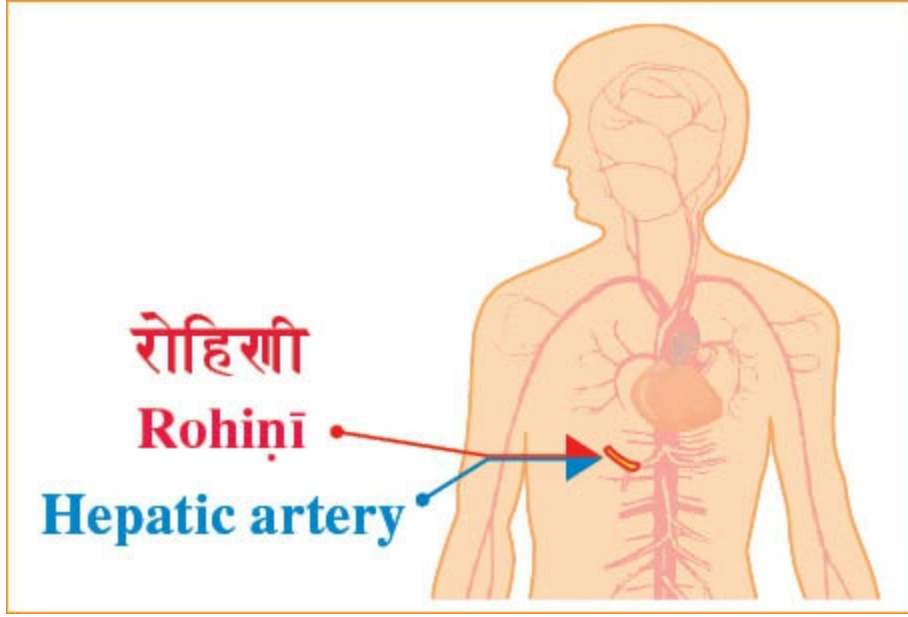
Surasā is derived from *su*, ‘good’ or ‘excellent’, plus *rasa*, ‘taste’ or ‘flavour’, and is therefore associated with the splenic artery, which sends branches to the stomach as well as to the spleen. The splenic artery is connected to taste and food because this is the area where food is first

encountered in the abdominal tract.

Surabhī is the cow of plenty, Kāmadhenu, and corresponds to the common hepatic artery. She has two daughters, Rohiṇī and Gandharvī, who correspond to the two branches of the common hepatic artery: the proper hepatic artery, which goes to the liver, and the gastroduodenal artery.

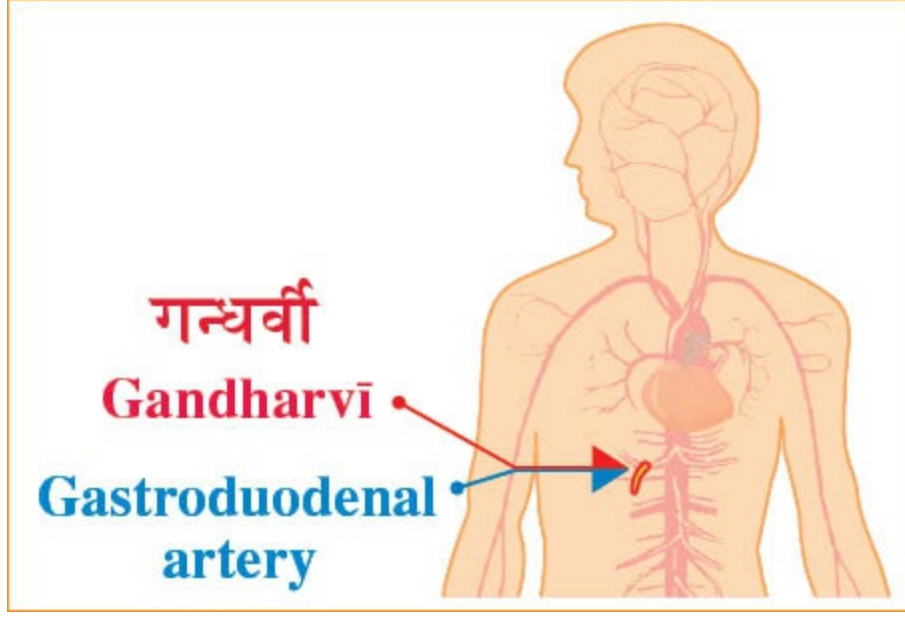
One of the functions of the liver is to store energy in the form of glycogen. Whenever we eat sugar or any type of carbohydrate, excess glucose molecules that are not digested are stored in the liver in the form of glycogen. The liver therefore provides a source of energy. Even when we are not eating but are continuing to consume energy, the liver helps keep the amount of sugar in our blood relatively constant by utilizing the stored glycogen to gradually release sugar in the blood according to need.

The liver is a vital organ, which has a number of important nourishing functions that maintain wholeness in the physiology. We can compare the liver to the cow of plenty. One of Surabhī's daughters is Rohiṇī, the mother of all cattle and cows, and we therefore associate Rohiṇī with the hepatic artery.



**Figure 21.22 Rohiṇī corresponds to the hepatic artery.**

Gandharvī is the other daughter of Surabhī and the granddaughter of Krodhavashā, and corresponds to the gastroduodenal artery. Gandharvī naturally brings to mind a connection with the *Gandharvas*. She is also said to be the mother of horses, which are capable of moving quickly and transporting information. The gastroduodenal artery sends nourishment to the ganglia in this particular part of the body as well as to the duodenum, which resembles the tail of a horse. It also sends blood to parts of the pancreas, the omentum (a large fold of peritoneum), and other areas inside the abdomen. The granddaughters of Krodhavashā, Rohiṇī and Gandharvī, therefore supply the upper part of the digestive tract.



**Figure 21.23 Gandharvī corresponds to the gastroduodenal artery.**

Let us now consider Krodhavashā's other daughters. Kadrū is a daughter of Daksha who married Kashyap. As we discussed in Chapter XX, Kadrū corresponds to the pulmonary artery and has a special relationship with Vinatā.<sup>13</sup> Kadrū is the mother of serpents, and Krodhavashā, as the mother of all animals, must also be her mother.

The remaining seven daughters of Krodhavashā are the remaining seven arteries that arise sequentially from the abdominal aorta. The first is the superior mesenteric artery, which corresponds to Mṛigamandā. Mṛigamandā had three offspring: Ṛiksha, Sṛimara, and Chamara. Ṛiksha is the progenitor of the boars, bears, and apes, and also corresponds to a star. Sṛimara gave rise to animals that frequent damp places, such as some species of antelopes, and Chamara gave rise to a different species of deer. *Chowrie* (a fly whisk) comes from the word *chamara*. The different branches of the superior mesenteric artery correspond to the offspring of Mṛigamandā, and supply three different areas of the digestive tract. Ṛiksha refers to the branch supplying the pancreas and duodenum, Sṛimara corresponds to the branches supplying the jejunum and ileum, and Chamara represents the branches supplying parts of the colon.

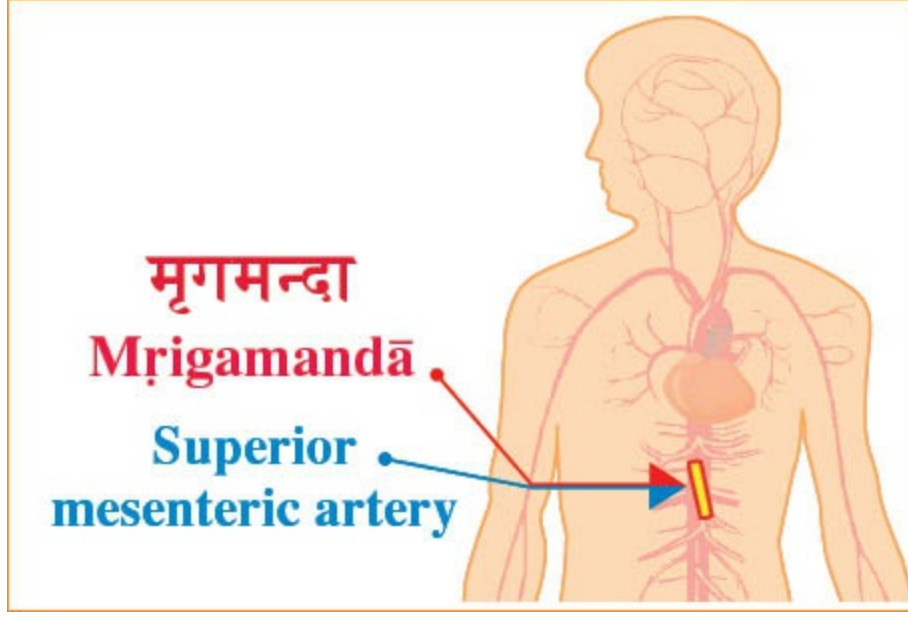


Figure 21.24 Mṛigamandā corresponds to the superior mesenteric artery.

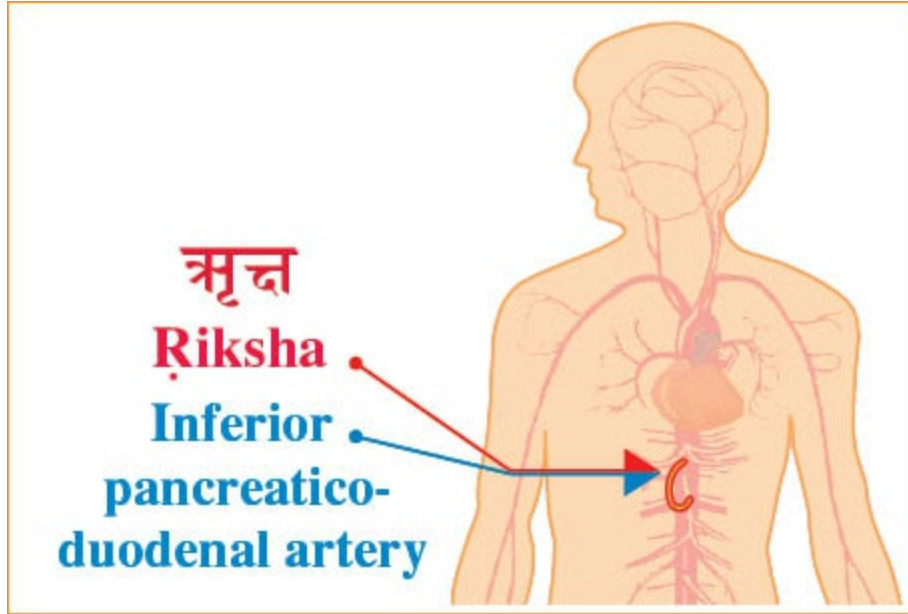
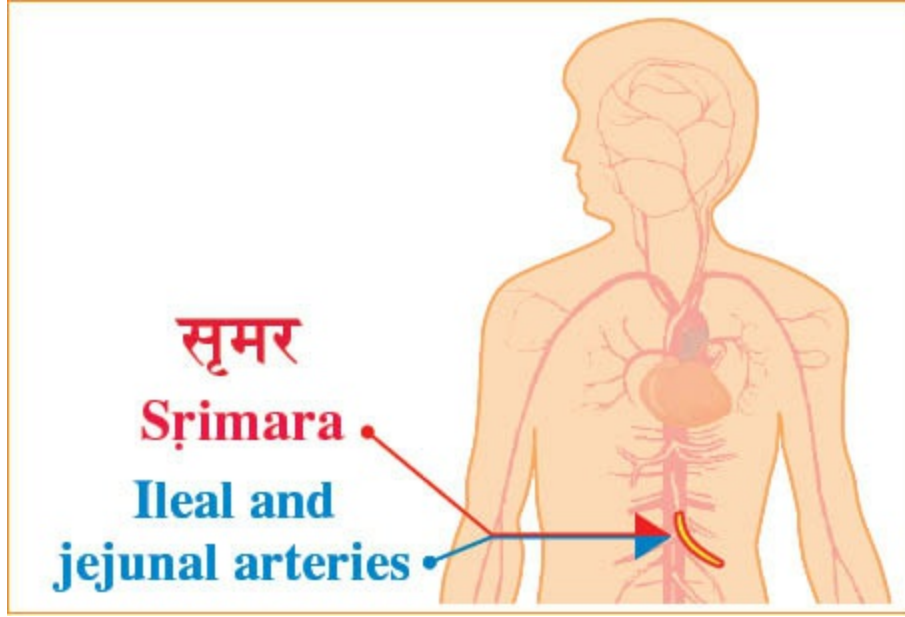
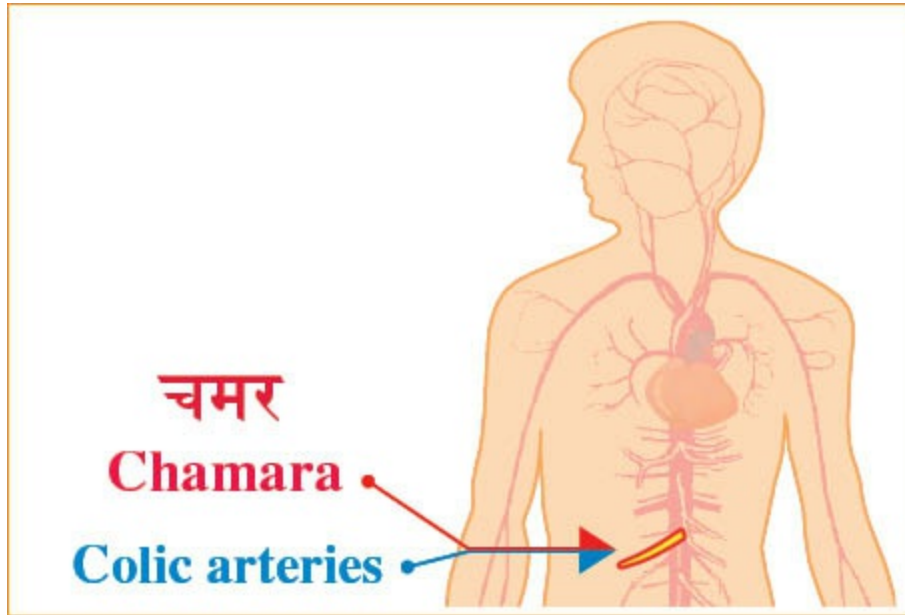


Figure 21.25 Ṛiksha corresponds to the inferior pancreaticoduodenal artery.





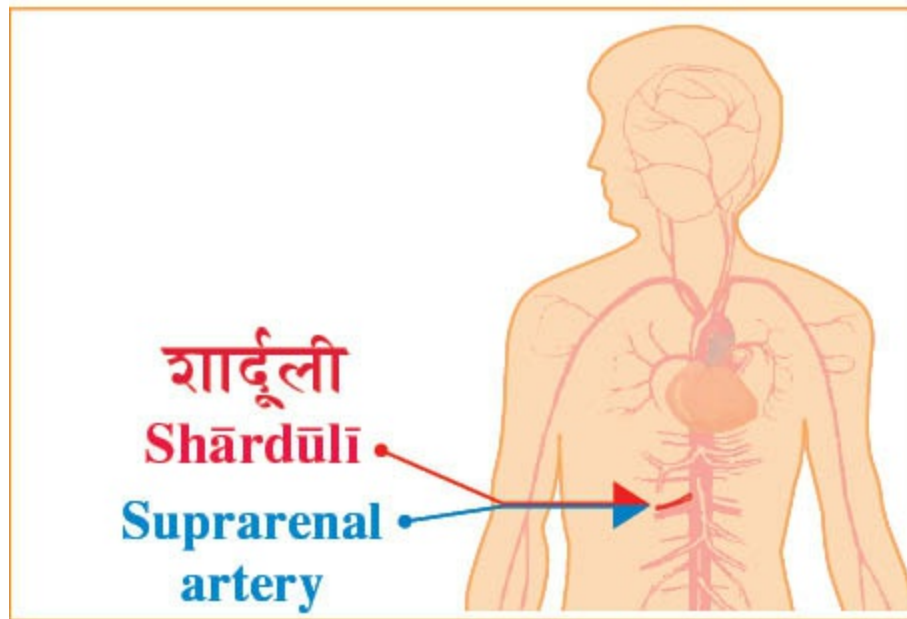
**Figure 21.26 Sṛimara corresponds to the ileal and jejunal arteries.**



**Figure 21.27 Chamara corresponds to the colic arteries.**

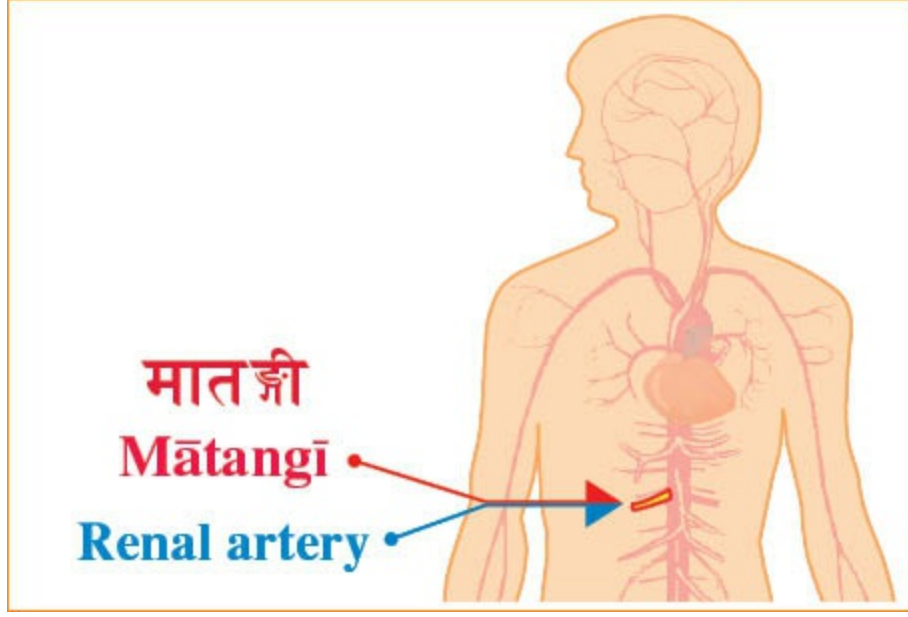
The second artery in this sequence coming off the abdominal aorta is the suprarenal artery, which goes to the suprarenal (adrenal) gland and corresponds to Shārdūlī. Shārdūlī is the mother of tigers and leopards, and the suprarenal artery supplies the adrenal gland that secretes adrenaline or

epinephrine to the body as part of the fight-or-flight response. When we are angry and want to fight, or when we are panic stricken and want to run away, the adrenal glands are strongly activated by the brain and pituitary gland. This gives strength and support to the whole cardiovascular system by increasing the blood pressure as part of the fight-or-flight response. If it is overworked, however, it can create stress in the body. The suprarenal artery, which supports the proper functioning of the adrenal gland, corresponds to Shārdūlī, the mother of tigers.



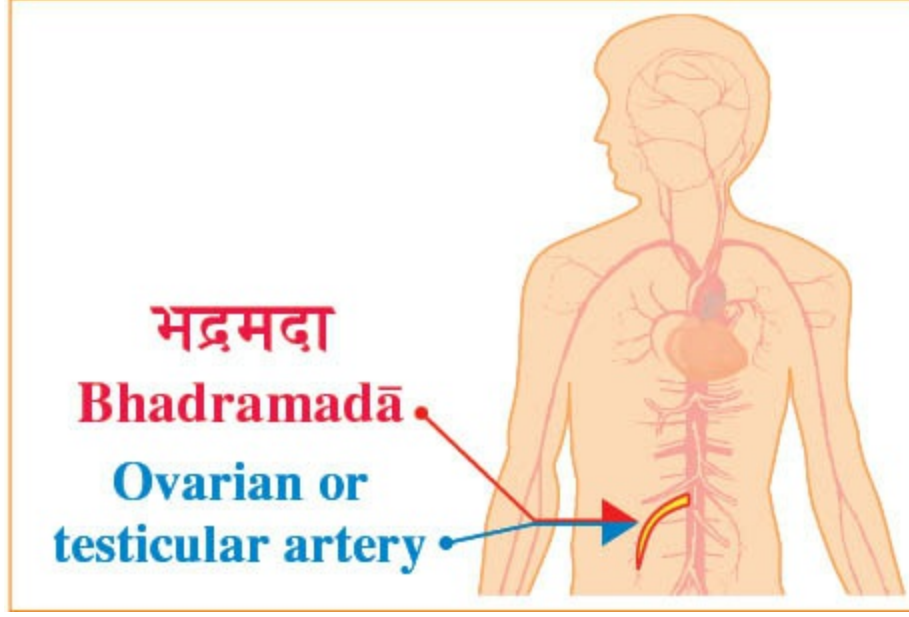
**Figure 21.28 Shārdūlī corresponds to the suprarenal artery.**

The third artery is the renal artery, corresponding to Mātangī, the mother of elephants. The kidneys are shaped like two large beans, and their main function is the excretion of watery waste. A kidney together with its ureter somewhat resembles an elephant with a large trunk, and an elephant's trunk is often associated with water. The correlation between the two is therefore based on both the shape of the structure and as well as its function.



**Figure 21.29 Mātangī corresponds to the renal artery.**

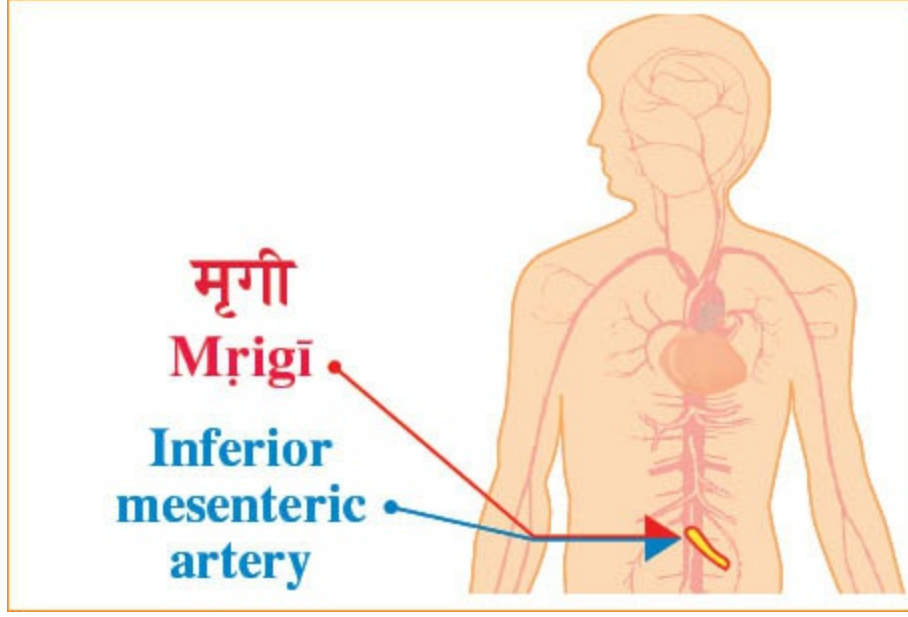
The next artery in the sequence is either the ovarian artery or the testicular artery, according to gender. The ovarian or testicular artery sends its blood flow to the corresponding organ in the body. These arteries correspond to Bhadramadā, the daughter of Krodhavashā who is the mother of Airāvata. Airāvata is Indra's elephant, and is described in the Mahābhārat as one of the *Ashtadiggajāḥ*, the eight elephants guarding the eight areas of the Earth.<sup>14</sup> In one story Airāvata is said to have caused the churning of the ocean at the beginning of creation.



**Figure 21.30 Bhadramadā corresponds to the ovarian or testicular artery.**

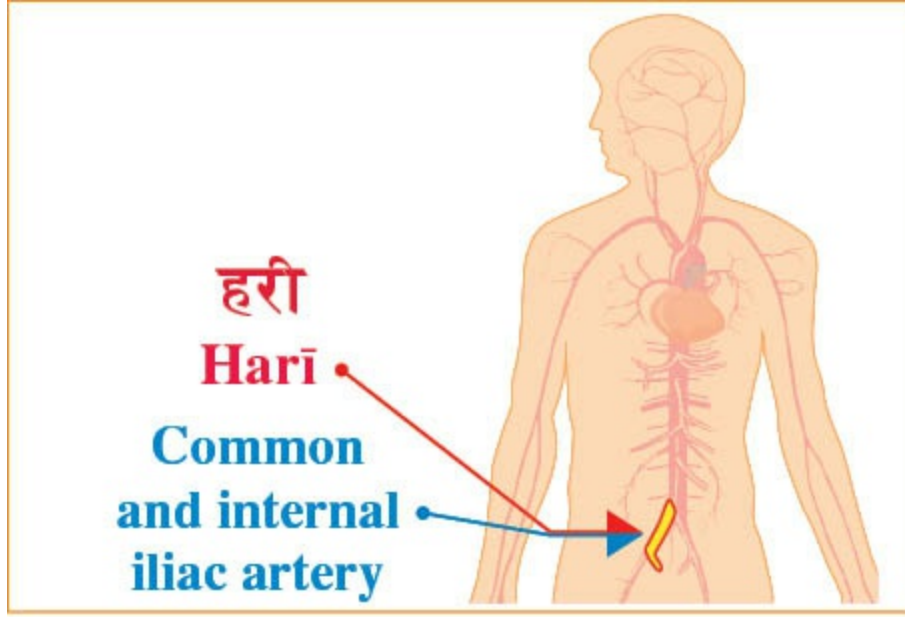
The ovaries and testes are the structures involved in the production of the finest aspect of digestion, the final and most refined product of metabolism, known as *Ojas*. *Ojas* is the physical expression of *Soma*, the unifying value of intelligence that connects physical existence and consciousness. *Ojas* corresponds to the *Amṛit* produced not only by the churning of the ocean of milk at the beginning of creation, but also in our own physiology as a result of transcending and ‘churning the ocean of consciousness’ during the practice of Transcendental Meditation.

The next artery in our sequence is the inferior mesenteric artery, which supplies the lower part of the abdomen, including the area of the colon and parts of the lower pelvic area. The inferior mesenteric artery corresponds to Mṛigī, a doe or female deer. A few centimetres below the inferior mesenteric artery, the abdominal aorta bifurcates and forms the terminal branches, the iliac arteries, which then descend to the lower extremities.



**Figure 21.31 Mṛigī corresponds to the inferior mesenteric artery.**

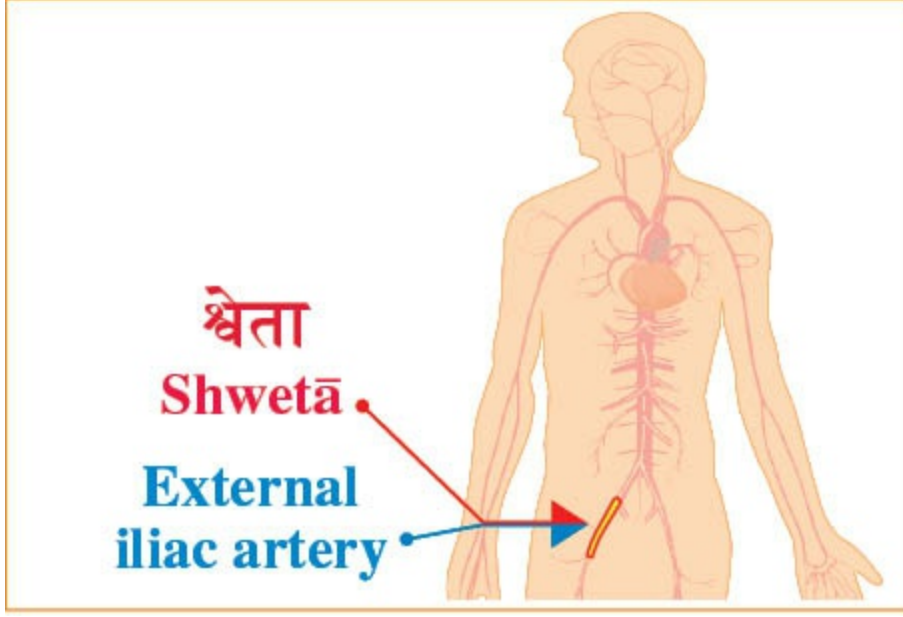
The common iliac artery with its extension the internal iliac artery—which has visceral and parietal branches—corresponds to Harī, a daughter of Krodhavashā. Harī is derived from the Sanskrit root *Hṛi*, which means ‘to carry’ or ‘to bear’. Harī is the mother of lions and *Vānara*, and also of some geese, parrots, and peacocks. The internal iliac artery sends its branches to structures that are located around the abdominal area, which we have designated as the globe of the Earth. It also supplies the reproductive organs in this area, which secrete hormones. We know that *Vānara* in the Rāmāyaṇ correspond to hormones, and Harī is the mother of *Vānara* as well as of lions. It is interesting to note that Durgā, who is said to ride upon a lion, has been placed in this area of the physiology.<sup>15</sup> Both her location and her carrier are therefore eminently suitable.



**Figure 21.32 Harī corresponds to the common iliac and internal iliac artery.**

We have now covered all but one of the arteries that support the different organs in the abdominal and pelvic area. This last artery and final daughter of Krodhavashā is the external iliac artery, which corresponds to Shwetā. The external iliac artery extends to the muscles and structures of the lower limbs, which allow us to walk and stand, and which support the region designated as the Earth as well as all that is above the Earth.

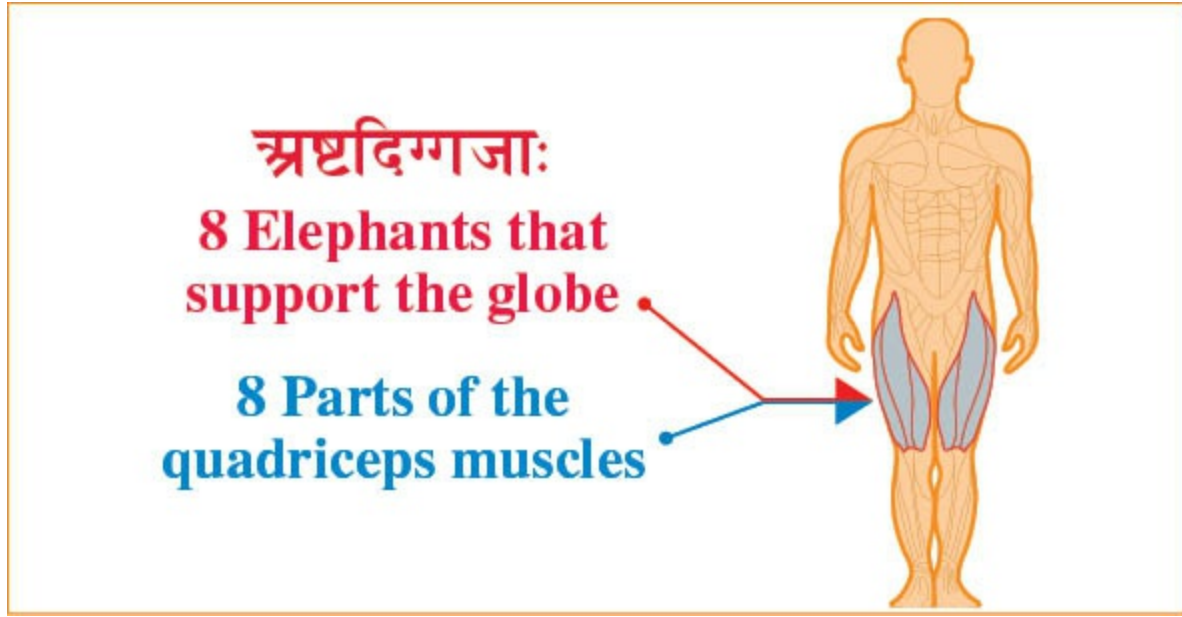




**Figure 21.33 Shwetā corresponds to the external iliac artery.**

The main muscle groups of the legs are the quadriceps. *Quadri* is a prefix meaning ‘four’, and the quadriceps are comprised of two sets of four muscles nourished by Shwetā. Shwetā is described in the Vedic Literature as the mother of the eight elephants that support the globe, which corresponds to the role of the external iliac artery to nourish the eight muscles of the quadriceps.

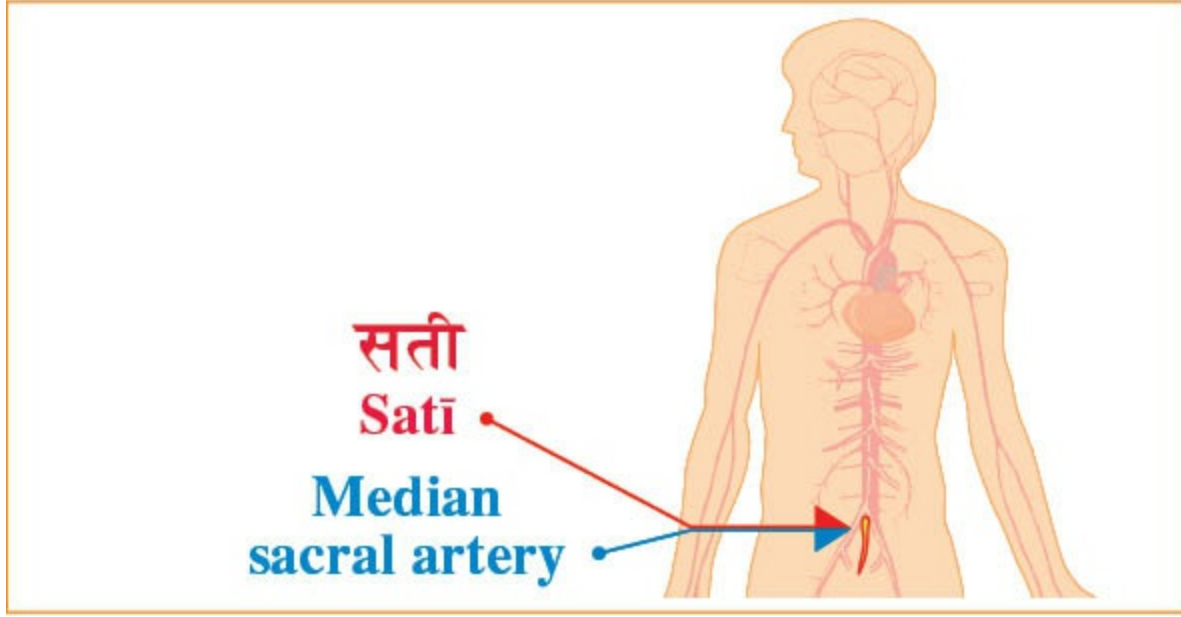
The eight elephants are called *Ashtadiggajāḥ*. Airāvata, Indra’s elephant, is said to be the structure—the ovaries or testes—sitting between the muscles present in the thighs. Airāvata’s mother is Bhadramadā, who corresponds to the ovarian or testicular artery.



**Figure 21.34 The Ashtadiggajāḥ, the 8 elephants that support the globe, correspond to the 8 parts of the quadriceps muscles.**

### **Satī**

Between the left and right common iliac artery is the median sacral artery, a small and delicate artery that goes to the tip of the sacrum. This small artery located at about the level of the tip of the spinal cord is Satī. Satī plays an important primordial role in the development of the entire physiology, and we encounter her in the genealogy in two ways: she is described as the daughter of Prasūti as well as the daughter of Asiknī, in both cases marrying Shiva. We have seen Prasūti as the procreative power, the intelligence of Natural Law that gives energy and direction from the *Prakṛiti* level to all the different physiological structures.<sup>16</sup> Asiknī is the nourishing power from the aorta, which distributes the blood flow coming from the heart to the entire physiology.<sup>17</sup>



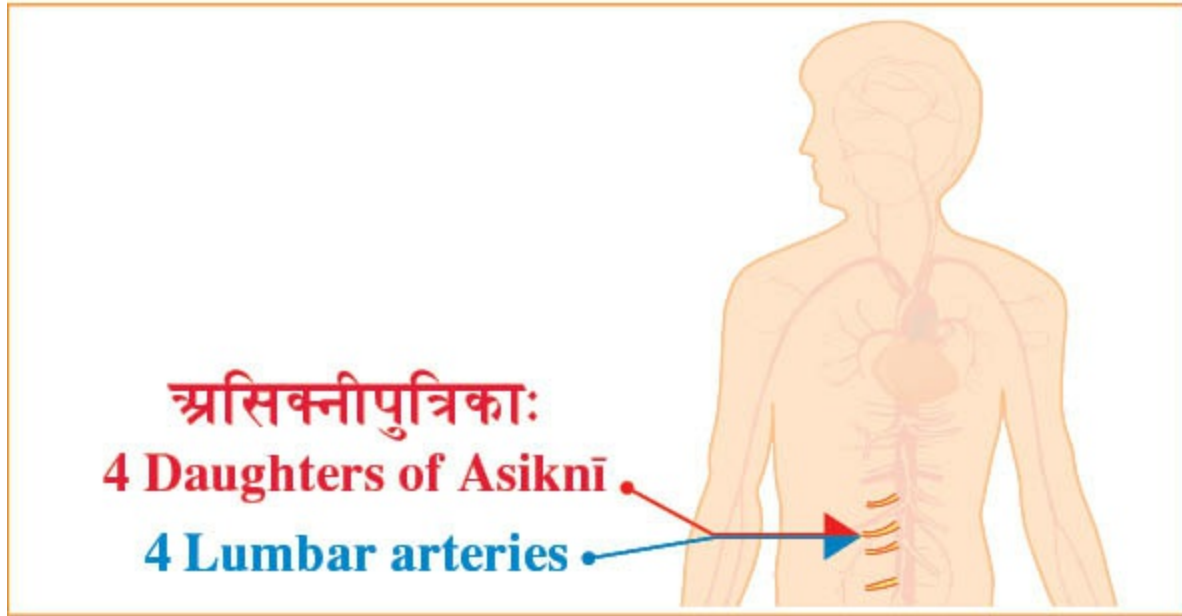
**Figure 21.35 Satī, Shiva’s Prakṛiti, corresponds to the median sacral artery.**

As the *Prakṛiti* of Shiva, Satī possesses both of these qualities: she is the energy and power of the primordial cell,<sup>18</sup> and she is the nourishing, *Prakṛiti* aspect, represented in this fine little artery situated near the tip of the spinal cord—the conus medullaris located at the silent point where Shiva sits. This silent point corresponds to the *Avyakta Sūkta*,<sup>19</sup> the silent and unmanifest *Sūkta* that Maharishi discovered in the structure of Ṛk Veda.

### **Segmental Parietal Arteries of the Abdominal Aorta**

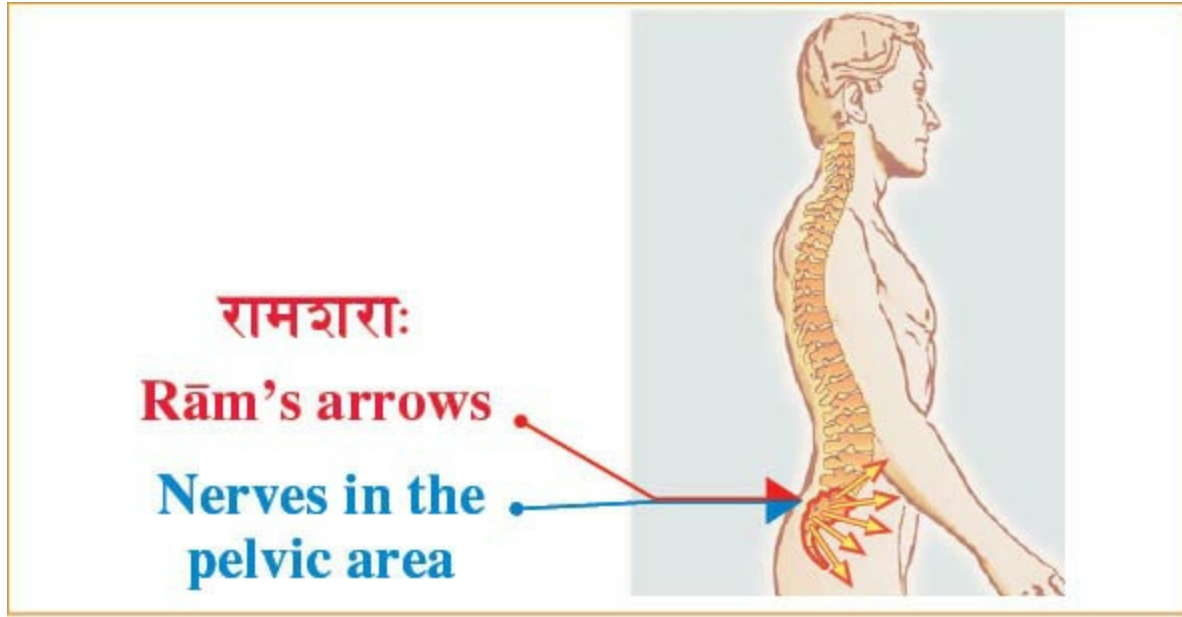
We have now considered all the visceral arteries of the abdomen and chest, which all come from the aorta, Asiknī. The four segmental parietal arteries of the abdominal area are the equivalent of the other segmental parietal arteries we encountered in the chest. We have seen that they correspond to Dharmadev’s *Patnī* and not to Kashyap’s, because they have a special quality that makes them different from the visceral and non-segmental arteries, and the scientific distinction between the two types of arteries is the basis for their association with different ‘husbands’.

These final four arteries at the level of the lumbar spine from L1 to L4 can be compared to the intercostal arteries in the chest, and are known as the lumbar arteries. They correspond to the four daughters of Asiknī, two of whom became the *Patnī* of Bahuputra and two of Kṛishāshwa. We have no names for the *Patnī* of Bahuputra, but Kṛishāshwa married Suprabhā and Jayā.



**Figure 21.36 The 4 daughters of Asiknī correspond to the 4 lumbar arteries.**

Suprabhā and Jayā each had 50 sons, whom Vishwāmitra turned into arrows that were given to Rām. These correspond to nerves that come from the pelvic area where Durgā is located, the centre of power and energy. The rapid ‘firing’ of neurons causes nerve impulses to travel along nerve fibres that run through small holes in the vertebral column to reach their target organs. These can be compared to the swift and precise shooting of arrows from Rām’s bow, the vertebral column.<sup>20</sup> When Rām left his home in early adolescence and undertook training with Vishwāmitra, he not only gained many purposeful skills and abilities but he also received these 100 special arrows.



**Figure 21.37 Rām's arrows correspond to the nerves in the pelvic area.**

*Jayā* is derived from the verb meaning to 'conquer' or 'be victorious', and *Jayā* is an attendant of *Durgā*. Therefore we see the relationship between the position of *Durgā* and her power, and *Suprabhā* and *Jayā* and their sons.

*Kṛishāshwa*'s other *Patnī* was *Suprabhā*. *Suprabhā* is one of the seven names of *Saraswatī*, and means 'very bright' or 'very beautiful'. Thus *Suprabhā* and *Jayā* together bring total knowledge and power, while their sons provided Rām with his arrows.

We have now examined all the daughters of *Daksha* except for the 27 who 'married' *Soma*. *Soma* is the Moon, and the daughters who 'married' *Soma* are the arteries that nourish the 27 *Nakshatras*. The 27 *Nakshatras* are situated in the brainstem area<sup>21</sup> and are nourished by many small branches of the vertebral artery and other arteries located in this part of the body. These arteries, called the pontine arteries, correspond to the daughters of *Asiknī* 'married' to *Soma*.

In this correlation and analysis we have not excluded a single artery branching from the aorta. Not a single daughter has been added or excluded.

Of course there are other arteries that manifest as divisions and subdivisions, but they are not part of this analysis. All daughters have been examined just as they are beautifully described in the Vedic Literature. This demonstrates again the great elegance and precision of the human physiology, and how it is an exact and perfect representation of Veda and Vedic Literature.

**Figure 21.38 The descendants of Asiknī and Daksha and their corresponding roles as arteries.** (On the next few pages.)

## The Arterial Tree in Human Physiology

### The Descendants of Asiknī

<b>The Aorta and its Branches</b>	<b>Asiknī and Her Daughters<sup>22</sup></b>
<b>Branches From the Aortic Arch</b>	<b>Daughters Married to Kashyap</b>
Right common carotid artery	Aditi
Left common carotid artery	Diti
Subclavian artery	Tāmrā
Vertebral artery	Bhāsī
Internal thoracic artery	Dhṛitarāshtrī
Thyrocervical trunk	Shukī
Costocervical artery	Kraunchī
Axillary artery	Shyenī
<b>Branches From the Thoracic Aorta Non-segmental and Visceral</b>	<b>Daughters Married to Kashyap, Angiras, Arishtanemi</b>
Bronchial arteries	Danu
Pericardial artery	Muni
Oesophageal artery (main branch)	Irā
Oesophageal arteries (supportive branches)	Daughters married to Angiras
Mediastinal artery (main branch)	Arishtā
Mediastinal arteries (supportive branches)	Daughters married to Arishtanemi
Superior phrenic artery	Khasā
<b>Segmental Parietal Branches</b>	<b>Daughters Married to Dharmadev</b>
1. Third posterior intercostal artery	Arundhatī
2. Fourth posterior intercostal artery	Bhānu
3. Fifth posterior intercostal artery	Lambā
4. Sixth posterior intercostal artery	Marutvatī

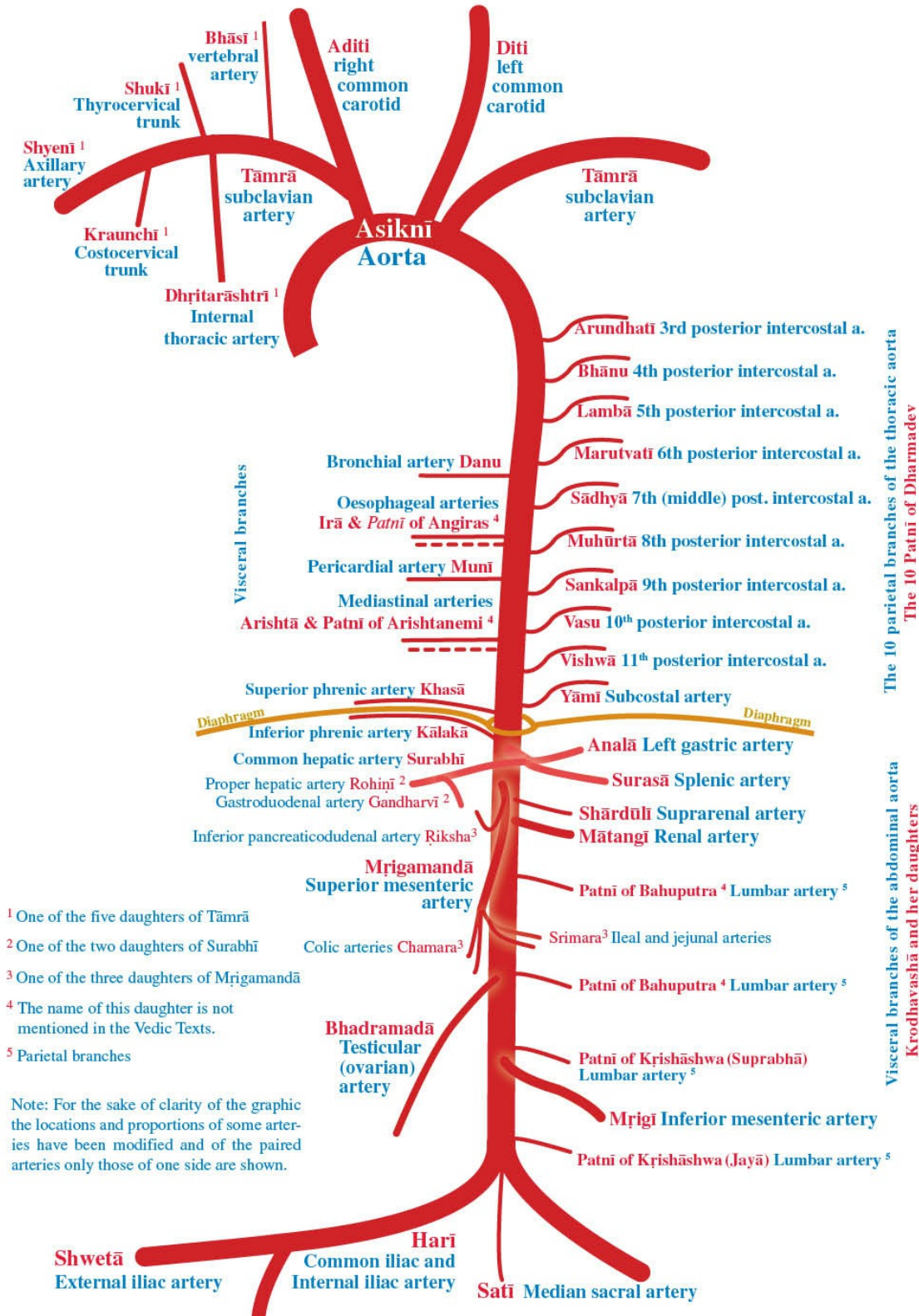


5. Seventh posterior intercostal artery	Sādhya
6. Eighth posterior intercostal artery	Muhūrtā
7. Ninth posterior intercostal artery	Sankalpā
8. Tenth posterior intercostal artery	Vasu
9. Eleventh posterior intercostal artery	Vishwā
10. Subcostal artery	Yamī
<hr/>	
<b>Branches From the Abdominal Aorta</b>	<b>Krodhavashā</b>
<b>Non-segmental and Visceral</b>	<b>and Her Daughters</b>
Inferior phrenic artery (branch of thoracic aorta / abdominal aorta)	Kālakā (daughter of Asiknī / Krodhavashā) <sup>23</sup>
Gastric arteries (branch of thoracic aorta / abdominal aorta)	Analā (daughter of Asiknī / Krodhavashā) <sup>23</sup>
Common hepatic artery (branch of thoracic aorta / abdominal aorta)	Surabhī (daughter of Asiknī / Krodhavashā) <sup>23</sup>
Gastroduodenal artery	Gandharvī
Proper hepatic artery	Rohinī
Splenic artery (branch of thoracic aorta / abdominal aorta)	Surasā (daughter of Asiknī / Krodhavashā) <sup>23</sup>
Superior mesenteric artery	Mṛigamandā
Inferior pancreaticoduodenal artery	Ṛiksha
Ileal and jejunal arteries	Sṛimara
Colic arteries	Chamara
Suprarenal artery	Shārdūlī
Renal artery	Mātangī
Testicular or ovarian artery	Bhadramadā
Inferior mesenteric artery	Mṛigī
Common iliac and internal iliac artery	Harī
External iliac artery	Shwetā
<b>Segmental Parietal Branches</b>	<b>Daughters Married to</b>
Lumbar arteries 1 and 2	<b>Bahuputra and Kṛishāshwa</b>
Lumbar arteries 3 and 4	Two daughters married to Bahuputra
	Two daughters (Suprabhā and Jayā) married to Kṛishāshwa
<b>Median sacral artery</b>	<b>Satī daughter of</b> <b>Prasūti /Asiknī married to Shiva</b>

**Figure 21.39 The family tree of Asiknī's daughters corresponds to the arterial tree. (Next chart. Double tap to enter zoom mode.)**

# The Arterial Tree of the Aorta and its Branches

## The Family Tree of Asiknī and Her Daughters



## Footnotes

1. See overview table and chart, The Arterial Tree in Human Physiology [figures 21.38 and 21.39](#).
2. Also the ‘non-segmental’ arteries have been once ‘segmental,’ but in the course of embryological development they change their positions and connections, and therefore in the adult they do not show the original segmental arrangement.
3. See *Human Physiology: Expression of Veda and the Vedic Literature*, figure 25, p. 75.
4. See Chapter VI, textbox ‘[The Meaning of Family Relations in the Context of the Rāmāyaṇ](#)’.
5. See Chapter XVII, [Ṛishi Angiras](#).
6. See *Human Physiology: Expression of Veda and the Vedic Literature*, p. 182.
7. Sambhava Parva of the Ādi Parva, section 65.
8. See Chapter 20, [Pulmonary Veins and Artery: Vinatā and Kadrū](#).
9. There are seven worlds beginning with Bhūr-loka (Earth), followed by Bhuvar-loka, Swar-loka, Mahar-loka, Janar-loka, Tapar-loka, and Brahma-loka. Accordingly we can locate seven areas between the abdominal area and the brain that correspond to these seven lokas. For example, Brahma-loka is the highest layer of the cerebral cortex, the region of total integration of all possible thought, speech, action, and sensory experience. This is the area where we encounter the fullness of अ ‘A’, as well as the fullness of the first Sūkta of Ṛk Veda, as brought to light by Maharishi in his Apaurusheya Bhāshya.
10. Āraṇya Kāṇḍ, 14.21–22.
11. Shrīmad Bhāgavat Mahāpurāṇ, 6.6.25–26.
12. *ibid*.
13. See Chapter 20, [Pulmonary Veins and Artery: Vinatā and Kadrū](#).
14. Mahābhārat, Ādi Parva, 66.
15. See [figure 4.4](#), and also *Human Physiology: Expression of Veda and the Vedic Literature*, pp, 375–

377.

16. See Chapter XX.

17. Ibid., *Asiknī*.

18. See Chapter IV, *The Prakṛiti* of Shiva

19. *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 76 & 87.

20. See Chapter XIII, *Rām's Arrows Return to His Quiver*.

21. See *Human Physiology: Expression of Veda and the Vedic Literature*, pp. 124–125.

22. See Chapter VI, textbox 'The Meaning of Family Relations in the Context of the Rāmāyaṇ'.

23. See Chapter XXI, *Krodhavashā* and descendants.



# Conclusion

## Conclusion

**H**is Holiness Maharishi Mahesh Yogi has revealed to us the most profound secrets of Nature's administration. He has described how the Unified Field of Natural Law, an eternal, non-changing field of pure Being, becomes the ever-changing, impermanent universe we see around us. In presenting this timeless knowledge, Maharishi has delineated in great detail how this eternal field of pure existence sequentially unfolds into the sounds and syllables of Veda and Vedic Literature, first as reverberations—which form each sound (*Shabda*), *Ṛichā*, *Pāda*, *Sūkta*, and *Maṇḍala* of the 40 branches of Veda and the Vedic Literature—and then as the forms and phenomena of the physical universe, including the human physiology. Thus the reverberations of pure Being become the entire universe, both creating as well as guiding and administering it.<sup>1</sup>

Maharishi has brought this eternal knowledge to light from a thoroughly scientific perspective, and through his tireless work and blessings we understand today that Veda is total Natural Law, that Veda consists of expressions of the Absolute, which guide the affairs of individual, national, and international life as well as the functioning of every aspect of the universe, with its stars, planets, and galaxies. And most significantly, Maharishi has given us practical, scientifically verified technologies that enable each of us to experience this same totality of Natural Law as our own simplest form of awareness, and to unfold it in our lives.

Maharishi's profound insights into the fabrics of Natural Law have enabled us to examine the different branches of the Vedic Literature and understand them as fabrics of our own physiology. It is in this light that we have examined the Vālmīki Rāmāyaṇ, not as an ancient myth or some bygone author's flight of fancy, but as the display of the move of the Absolute. Maharishi describes Rām as *Brahm*, Totality, pure spirituality, the ultimate reality dwelling eternally within the heart and mind of every human being. The story of Rām is therefore the account of the perfect silence of *Purusha*



and the unbounded creativity of *Prakṛiti* with its infinite expressions, and how the flow of this Totality expresses itself as our own physiology and the entire universe around us; and it is the display of how this supreme reality can be unfolded in the awareness of every individual and in the collective consciousness of every society.

From the perspective of Unity, all of creation is nothing but oneness moving within itself, but from a relative perspective we see time and motion, objects and places, and differentiation and change in our own physiology. The true reality, however, is that every fibre of existence is nothing but absolute pure Being. Through Maharishi's Vedic Programmes and Technologies we are able to experience and understand that the reality of life is nothing but infinite, unbounded, pure eternity moving within itself, enjoying its own infinity at every point, with every step of progression containing Totality and every point of space and time containing Wholeness.

The story of the Rāmāyaṇ continually reminds us that the flow of the Absolute is always within itself, wherever it goes and in whatever way it may seem to change. We may consider the physiology as a collection of separately functioning parts, but when we understand the deepest levels of its functioning we find that every point is in total harmony with the entire physiology, every cell always takes into consideration the whole. When there is a separation between individual cells and the wholeness of the body, disease arises. The problems of disease are the problems of separation and segregation, because of which a part of the body no longer functions in tune with the whole.

When Rām moved from place to place<sup>2</sup> he gave the impression that he was an individual reality, yet the true nature of his movement was always Wholeness overtaking the physiology. The Rāmāyaṇ is the story of regaining the memory of our own true nature. This beautiful principle was expressed by Arjuna in the Bhagavad-Gītā, as Lord Kṛishṇa was concluding his teaching to him. Upon realizing his own eternal, unbounded nature, Arjuna exclaimed:

## स्मृतिर्लब्धा

*Smṛitir labdhā*

*(Bhagavad-Gītā, 18.73)*

*I have regained memory.*

The Rāmāyaṇ dispels the illusion that everything is separate from our true Self, and reveals how we can regain Unity. In the state of ignorance there is a loss of Wholeness, a loss of the unity of all life, and in order to re-gain it we must transcend and go back to the Self, to pure Being. Only the direct experience of Being, Ātmā, will enable us to unfold the infinite potential that lies within each of us and ultimately realize on the level of our own experience that everything is Brahm, everything is Totality, a reality expressed by the immortal words of the Upanishads:

## सद्वर्णं खलु इदं ब्रह्म

*Sarvaṁ Khalu Idam Brahm*

*(Chhāndogya Upanishad, 3.14.1)*

*All this is Brahm—Totality, WHOLENESS.*

Brahmā, the Creator, has produced a divine reality in our physiology. It is a delightful and extraordinary experience to observe and comprehend the presence of the abstract, unmanifest, and sometimes mysterious Natural Law in our muscles, bones, nerves, heart, veins, arteries, and cells. Together these parts display total Natural Law.

Even though we may identify ourselves with the thousands of small elements of daily life, total Natural Law has given us the opportunity to reach the highest level of human evolution—it has given us Veda and it has given us Maharishi to teach us that Veda is total Natural Law, and that it is within our own physiology. This is a message that Maharishi presented for over fifty

years, sometimes indirectly, sometimes quite directly, and often before we were capable of comprehending what it meant. But when the time was right he enabled us to discover for ourselves that it is truly there.

Brahmā gave us the Veda, and he embodied himself in the teacher, the wise *Ṛishi* who gave us the understanding of what Veda is and where it can be found. He also gave us the stories of the Bhagavad-Gītā and the Rāmāyaṇ, which we read again and again, understanding according to our level of consciousness.

There are different levels of the perception of Natural Law, and through Maharishi's Transcendental Meditation we gain the experience of the most abstract level of pure Being, the Self. And through the knowledge given by Maharishi on this refined level of intellect we begin to truly comprehend the structure of his *Apaurusheya Bhāshya* of Ṛk Veda and all forty branches of Veda and the Vedic Literature.

Maharishi has given us this knowledge in such a way that we can understand and experience it within ourselves. On the basis of his teaching we are able to truly understand and appreciate the significance of Rām's life, which has been loved and cherished for millennia because it is the expression of truth. Now with Maharishi's blessings we have become the knowers of the totality of Natural Law and its expressions, and we can see how elegantly it is embodied in our own physiology—how the structure and function of our body is the story of the Rāmāyaṇ continually taking place within us, with all of its *Devatās*, *Ṛishis*, and *Rākshasas*, and all of their encounters, relationships, and even their genealogies.

Through the course of this study we have discussed the most significant characters and their locations in the physiology, and how their relationships describe physiological actions and interactions. In Chapter XVII, we saw how Wholeness moves as it integrates specific values into one holistic value, and we understand why it is that the wise of all religions have described the human body as the temple of God, the expression of God, and how the will of

God is present in human physiology.

The Vedic Literature reveals that Veda is within everyone, Veda is everyone, and there is nothing but total Natural Law, *Brahm*. The beautiful stories of the Purāṇ have survived through the ages because they *are* Natural Law—they do not depend upon humankind for their existence, for they are the completely self-sufficient, infinite expressions of Natural Law itself. They are oneness, they are infinity, they are the fountainhead of everything. Indeed they are the unmanifest that manifests itself, the dynamism within silence. Without them nothing exists, for they are the embodiments of Natural Law. In the state of enlightenment—on that most profound level of experience and understanding—we realize that the entire body is nothing but consciousness, Wholeness moving within itself. We are the incarnation of all the Laws of Nature, we are the embodiments of Totality. Every individual is truly Cosmic.

Maharishi has constantly repeated to the scientists of the world that matter is consciousness, that everything is consciousness—Veda is in the physiology, and the physiology is Veda. This presents the beautiful relationship between matter and its underlying reality. This reality is unmanifest, but it is available in a vibrational form in Veda and the Vedic Literature. And it is available to us in the state of pure consciousness, the unmanifest level of life that expresses itself through all levels of creation in becoming human physiology and the entire universe.

Veda and the Vedic Literature are *Nitya*, eternal, and *Apaurusheya*, uncreated. The Rāmāyaṇ, as part of the branch of Vedic Literature known as Itihās, is an aspect of that eternal body of knowledge. It is not a composed work of literature nor an intellectual record of historical events, but is rather the expression of the Laws of Nature themselves. This is why it is perfect. It includes within it the principles of ideal administration, which are expressed in this age in Maharishi's Global Country of World Peace.

Maharishi founded the Global Country of World Peace to create Unity

Consciousness—not only for the millions of individuals who practise his Transcendental Meditation programme and who are growing in enlightenment every day, but for entire nations to rise to higher levels of life through the collective technologies of Maharishi's Vedic Science. With its basis in the Constitution of the Universe, the Global Country of World Peace gives nourishment and knowledge to all the countries of the world through groups of Yogic Flyers, so that the reality of Unity Consciousness can be lived in the consciousness of all mankind.

We have seen that the Rāmāyaṇ perfectly describes the functioning of all aspects of the physiology. The precision and beauty of the correlation is amazing—no numbers in the physiology have been ignored, added, changed, or in any way transformed. Our physiology corresponds exactly to what is described in the Vedic Literature. Maharishi has inspired and guided this discovery, revealing every part of the physical structure of our human body to be Veda. Maharishi has given us a great treasure of knowledge, the treasure of total Natural Law.

Maharishi has played a unique and irreplaceable role in the evolution and history of humankind by bringing us the understanding that Veda and the Vedic Literature embody total Natural Law, and by revealing this understanding to be scientific and practical. He has shown us how to apply Vedic Knowledge to every field of life, including education, health, architecture, agriculture, and in all the rhythms of life expressed by Vedic Astrology, Jyotish. We can apply the knowledge and technology of Maharishi's Vedic Science to prevent disease and create perfect health for every individual and every society. This is a beautiful opportunity for each of us to enliven total Natural Law in our own awareness, and live Unity in our daily lives. It is the birthright of every human being to be cosmic and live in Unity Consciousness. Maharishi's Global Country of World Peace will continue to apply these technologies on a global level to raise world consciousness and bring Heaven to Earth. This is the enormous gift of Maharishi from the glorious Holy Tradition of Vedic Masters.

## ***Footnotes***

1. See [figure 1.3](#) and [figure 1.5](#).
2. See [figure 17.1](#), [figure 17.2](#) and [figure 17.3](#), The Path of Rām in India and in the Human Physiology





# Appendices

# Appendix I

## Summary of the Rāmāyaṇ Story

### English Translation of the First *Sarga* of Vālmīki Rāmāyaṇ

**T**he ascetic Vālmīki asked the following of Nārada, the foremost of ascetics and the greatest among knowers of the Veda:

‘Who is alive in the world who is possessed of the (highest) qualities, possessed of strength, a knower of *Dharma*, a knower of what is right, a speaker of truth, and firm of vow? Who is endowed with proper conduct, intent on the welfare of all beings, a man of knowledge, competent, the sight of whom is uniquely dear? Who is Self-realized, has conquered anger, blazes like lightning, and never cavils? And who, his anger having arisen in battle, do the *Devas* fear? I am extremely curious, Maharshi, and wish to hear, for you are capable of knowing such a man.’

Hearing Vālmīki’s expression, Nārada, the knower of the three worlds, filled with bliss, exclaiming ‘listen!’ spoke these words:

‘Listen, O Sage! After careful consideration I will tell you of the man endowed with all those qualities that you have described, which are extremely difficult to obtain. Known as Rām, born in the family of Ikshwāku, he is celebrated by the people. He is established in the Self, of great prowess, effulgent, patient, and powerful; he is intelligent, wise, eloquent, blessed, a tamer of foes, broad shouldered; he has powerful arms, a neck like a conch, and a mighty chin. He is broad-chested, possessed of a great bow, his collar bone is concealed (by muscle), and he is a crusher of foes; his arms extend to his knees, he has a beautiful head, an excellent forehead, and a graceful stride. He is of medium height, has evenly proportioned limbs, an agreeable complexion, is radiant, full-chested, wide-eyed, splendorous, and has auspicious marks.

‘He is a knower of *Dharma*, the embodiment of truth, intent upon the welfare of all beings, famous, endowed with knowledge, pure, self-controlled, and established in *Samādhi* (self-referral consciousness, *Ātmā*). He is the peer of Prajāpati, blessed, the maintainer of the world, the crusher of foes, the ruler of the people of the world, and the protector of *Dharma*.

‘He is the protector of His own *Dharma* and the protector of his own people, a knower of the reality of Veda and Vedānga and an expert in Dhanur-Veda. He is a knower of the essential reality of all the *Shāstras*, established in *Smṛiti*, effulgent, brilliant, dear to the entire world, saintly, and wise.

‘He is always approached by the righteous, just as the ocean by the rivers, and is noble and even with everyone; and he is always dear to the sight. He who is endowed with all the best qualities brings bliss to Kausalyā; he is as deep as the ocean, and as steadfast as a mountain, is the equal of Viṣṇu in valour, dear to sight like the Moon, similar to Kālāgni (the fire at the end of time) in anger, and equal to the Earth in patience.

‘Dasharath, the Lord of the Earth, was resolute on the welfare of his citizens, and because of his desire to please them he thought to install his eldest son Rām, endowed with all the previously-mentioned qualities, and who possessed unfailing prowess and the highest virtue, as his successor. His *Patnī*, queen Kaikeyī, seeing the preparations for the installation, and having previously been granted a boon by Dasharath, asked for Rām’s banishment and for the coronation of Bharat as king.

‘Because he always spoke the truth, Dasharath was bound by the noose of *Dharma*, and banished his dear son Rām. Cherishing the wisdom of his father, and in deference to his father’s command made as a boon to Kaikeyī, the brave Rām went to the forest. His dear and compassionate brother Lakshman, the bringer of bliss to (his mother) Sumitrā and his brother’s favourite, followed Rām from affection, testifying to his love. Sītā—his bride born in the family of Janaka and eternally as dear to him as his breath, unbounded as Devamāyā and endowed with all the best qualities, the

foremost of ladies—followed Rām as Rohiṇī follows the Moon. The citizens of Ayodhyā followed him for a long way, as did his father Dasharath.

‘Encountering Guha, the dear lord of the Nishādas, Rām, ever established in *Dharma*, along with Sītā and Lakshmaṇ and Guha, dismissed the charioteer at Shṛingaverapura on the banks of the Gangā. Going from forest to forest, crossing deep rivers, and reaching Chitrakūt according to Bharadwāja’s instructions, the three built a comfortable cottage and dwelt happily there, delighting in the forest as would *Devas* and *Gandharvas*.

‘After Rām had departed to Chitrakūt, King Dasharath grieved for the loss of his son. Lamenting, he departed for heaven. King Dasharath having passed on, the mighty and brave Bharat, though enjoined by the *Brāhmaṇas* with Vasishtha at their head to assume the throne, did not desire kingship and went to the forest to gain the favour of the venerable Rām.

‘So, going to the great souled Rām of eternal prowess, filled with noble emotions, he implored Rām, and spoke these words to his brother: “You alone are the king, the knower of *Dharma*”. Even though he was the most illustrious, the most resplendent, the most glorious, and of mighty strength, Rām did not desire the kingdom because of his father’s behest. And so, giving his sandals for the kingdom, the elder brother repeatedly urged Bharat to turn back. Unfulfilled in his desire, (Bharat) touched Rām’s feet and ruled from Nandigrām, while awaiting Rām’s return.

‘Once Bharat had departed, the blessed and one-pointed Lord Rām, the abode of *Satya* (truth) who had conquered his senses, entered the Daṇḍak forest, concerned that the citizens might return to that region.

‘After entering the great forest and killing the *Rākshasa* Virādha, the lotus-eyed Rām beheld Ṛishi Sharabhanga, as well as Sūtīkshṇa, Agastya, and Agastya’s brother. Feeling supremely delighted, he took the bow of Indra, a sword, and a quiver ever-filled with arrows on Agastya’s advice.

‘While Rām was dwelling in the forest along with the forest dwellers, all the *Ṛishis* approached him to request that he destroy the *Asuras* and *Rākshasas*. Rām listened to them regarding the *Rākshasas*, and then promised, in the presence of the *Ṛishis*—the dwellers of the forest who were as glorious as Agni—to destroy the *Rākshasas* in battle.

‘While Rām was dwelling in the Janasthān he disfigured Shūrpaṇakhā, a *Rākshasī* dwelling in the area who could change form at will. Then Rām killed all the *Rākshasas* in battle who were incited by Shūrpaṇakhā’s cries, including Khara, Trishiras, the *Rākshasa* Dūshaṇa, and their followers. While abiding there, Rām killed fourteen thousand *Rākshasas* dwelling in the Janasthān.

‘Rāvaṇ, hearing of the destruction, became exceedingly angry. He chose a *Rākshasa* by the name of Mārīcha, for an ally, although Mārīcha, enjoined him as follows: “It is not proper to be opposed by that mighty one, O Rāvaṇ”. Yet not heeding those words, Rāvaṇ, impelled by his destiny, went to (Rām’s) *Āshram* with Mārīcha, and causing the two princes (Rām and Lakshmaṇ) to be drawn away by the deceptive Mārīcha, Rāvaṇ seized Sītā and killed the eagle Jatāyu. Rāghava seeing the eagle mortally wounded, and hearing from him of the abduction of Maithilī (Sītā), grieved, tormented by sorrow, his senses distressed.

‘Then he cremated the eagle, and in his grief wandered into the forest, looking for Sītā and Rāvaṇ. Killing a *Rākshasa* named Kabandha, who was disfigured and horrible to behold, the mighty armed cremated him. From heaven Kabandha said to Rām “seek the ascetic Shabarī, who is perfected in *Dharma* and the embodiment of *Dharma*, O Rāghava”. The splendid destroyer of foes thus approached Shabarī.

‘After she had properly honoured Rām, that son of Dasharath met the *Vānara* Hanumān on the bank of the Pampā river. Following Hanumān’s advice, Rām allied himself with Sugrīva, to whom the mighty Rām recited his entire story from the beginning, including the account of Sītā. Sugrīva was delighted, and

having heard Rām's story they made friends in the presence of Agni (the *Devatā* who presides over fire). Then Sugrīva's entire tale of his hostility with the *Vānara* (monkey-like being) king was related affectionately and sorrowfully to Rām, and as a result Rām promised that he would destroy Vālī.

‘At that point the *Vānara* Sugrīva described Vālī's strength, as he was concerned as to Rām's prowess. In order to convince Rām, Sugrīva pointed out the huge body of Dundubhi, which was like a great mountain. The mighty armed Rām, of great strength, smilingly looked at the bones, and dispatched them with his big toe fully ten *yojanas*.<sup>1</sup> Then he pierced seven sāl trees with one arrow, as well as a mountain and Rasātala, thus inspiring Sugrīva's confidence.

‘The great *Vānara*, being fully pleased by the throw, took Rām to Kishkindhā. There that best of *Vānara*, the gold-coloured Sugrīva, roared. Hearing that great sound, Vālī, the lord of *Vānara*, approached, and after reassuring his *Patnī*, Tārā, he engaged Sugrīva in battle. Rāghava (Rām) then killed Vālī right there with one arrow, and having killed Vālī in battle Rāghava restored Sugrīva to the throne according to his promise. Sugrīva, that bull among *Vānara*, then gathered all the *Vānara* together, and dispatched them in every direction with the hope of their finding the daughter of Janaka.

‘On the advice of the vulture Sampāti, the mighty Hanumān flew across the ocean, a hundred *yojanas* wide. Approaching Lankā, the city protected by Rāvaṇ, Hanumān saw Sītā meditating in an *Ashok* grove. Showing Vaidehī (Sītā) a token and telling her all the news while consoling her, he proceeded to destroy the grove. Killing five army commanders as well as seven of the ministers' sons, and crushing the heroic Aksha, he allowed himself to be captured, knowing that he was protected by the *Astra* that he received as a boon from Lord Brahmā. Enduring the *Rākshasas* through his own choice, the hero Hanumān then burned the city of Lankā while still bound—except



for Sītā, the princess of Mithilā—and then the great *Vānara* returned to tell Rām the good news.

‘Approaching the great-souled Rām and circumambulating him, Hanumān, whose Self was truly unbounded, said, ‘Sītā has in fact been found’. Rām then went to the bank of the great ocean along with Sugrīva, and stirred the ocean with his arrows, which were like the Sun. The ocean, the lord of rivers, revealed himself, and with his instructions Nala built a bridge. Rām crossed the bridge to the city of Lankā, and having conquered Rāvaṇ in battle he rescued Sītā, but he then became ashamed. Rām then spoke harshly to Sītā amidst the assembly, and the wise Sītā enduring his words entered the fire.

‘Being informed by Agni that Sītā was without sin, the three worlds—both moving and unmoving—along with the hosts of *Ṛishis*, were pleased with this great deed of the great souled Rāghava. Rām, worshipped by all the *Devatās*, shown blissfully.

‘Installing Vibhīshaṇ as Lord of the *Rākshasas* in Lankā, and having accomplished what needed to be done, Rām was filled with bliss, free from any affliction. Securing a boon from the *Devatās* he brought to life the *Vānara* who had helped him in battle. Rām was then transported to Ayodhyā by the chariot Pushpak, surrounded by friends.

‘Going to the *Āshram* of Bharadvāja, the eternally heroic Rām sent Hanumān to see Bharat. Rām recounted the events, and then ascending the chariot went to Nandigrām with Sugrīva. At Nandigrām, the sinless Rām, having rescued Sītā, disentangled his hair and with his brothers again regained the kingdom.

‘During the Reign of Rām the people were exceedingly happy, content, fulfilled, and easily lived in accord with *Dharma*; they were free of sickness, free from disease, and bereft of famine and fear.

‘During the reign of Rām, Rām Rāj, no man witnessed the death of a son, and women were never widows, and were eternally devoted to their husbands.

‘During the reign of Rām there was no fear of fire, nor did anyone drown; nor was there any fear of *Vāta* disorders, nor of fever, nor was there old age. Nor was there fear of hunger there, nor fear of thieves, and all the kingdoms were filled with wealth and the abundance of food.

‘Everyone was eternally fulfilled as in *Sat Yuga*, and hundreds of *Ashwamedha Yagyas* were performed, along with other *Yagyas*, performed using an abundance of gold. Properly distributing crores of cows to the learned, and giving unlimited wealth to the *Brāhmaṇas*, the highly illustrious Rāghava (Rām) established royal families a hundred times more powerful than before.

‘And in the world, all four divisions of society were engaged in their own *Dharma*, according to position. Rām having dwelt in the kingdom for eleven thousand years then departed for *Brahma-loka*.

‘He who reads the deeds of Rām—which is purifying, the destroyer of sins, endowed with merit, and equal to the Veda—will be freed from all sins. A man reading this immortality-bringing story, the Rāmāyaṇ, will be honoured in heaven after having departed the world, together with his sons, grandsons, and attendants. A *Brāhmaṇa* reading it will gain the highest level of speech, a *Kshatriya* will gain lordship over the earth, a *Vaishya* will gain the result of much merit, and a *Shudra* as well will attain greatness.’

*Thus is the first sarga in the Bāl Kāṇḍ of Shrīmad Rāmāyaṇ of Ṛishi Vālmīki*

### ***Footnotes***

1. Approximately 130–160 kms.



## Appendix II: Individuals, Relationships, Places, and Events in the Rāmāyaṇ and Their Corresponding Physiological Form

Vedic Name		English Name	Physiological Form
अदिति	Aditi	Right common carotid artery	Figure 20.8
अगस्त्य	Agastya	Inferior olivary nucleus	Figure 8.4 Figure 8.6 Figure 17.18
अहल्य	Ahalyā	An artery of the medulla oblongata	Figure 9.12
अनला	Analā	Gastric artery	Figure 21.19
अङ्गद	Angada	Input to the pituitary gland via the pituitary stalk	Figure 13.7
अङ्गिरस्	Angiras	General visceral sensory column of the brainstem	Figure 17.32
आरण्यक	Āraṇyak (6 books)	The 6 sets of fasciculi proprii around the grey matter of the spinal cord	Figure 7.6
अरिष्टा	Arishtā	Mediastinal arteries	Figure 21.15
अरुणा	Aruṇa	Molecular carrier system, precursors	Figure 20.19
अरुन्धती	Arundhatī	Third posterior intercostal artery	Figure 21.4
अश्रम	Āshram of the Ṛishis	Brainstem nuclei	Figure 17.13
अष्टदिग्गजाः	Ashtadiggajāḥ (8 elephants)	The 8 parts of the quadriceps muscles	Figure 21.34
अश्वमेध	Ashwamedha Yagya	Transformations within the Hippocampus	Figure 9.7

असिक्नी	Asiknī	Aorta	Figure 20.7
असिक्नीपुत्रिकाः	Asiknī, daughters married to Dharmadev	Parietal branches from the thoracic aorta	Figure 21.38 Figure 21.39
असिक्नीपुत्रिकाः	Asiknī, daughters married to Kashyap	Branches from the aortic arc	Figure 21.38 Figure 21.39
असिक्नीपुत्रिकाः	Asiknī, daughters married to Kashyap, Angiras and Arishtanemi	Visceral branches from the thoracic aorta	Figure 21.38 Figure 21.39
असिक्नीपुत्रिकाः	Asiknī, 4 daughters married to Bahuputra and Kṛishāshwa	The 4 lumbar arteries	Figure 21.36 Figure 21.38
असिक्नी दक्ष	Asiknī and Daksha, descendants of	The arterial tree in human physiology	Figure 21.38 Figure 21.39
अत्रि	Atri	Special somatic sensory column of the brainstem	Figure 17.33
अयोध्या	Ayodhyā	The area of the brain around the superficial middle cerebral vein; the whole brain	Figure 6.4
साल	Ayodhyā, fortress	Blood-brain barrier	Figure 6.5
भद्रमदा	Bhadramadā	Ovarian or testicular artery	Figure 21.30
भानु	Bhānu	Fourth posterior intercostal artery	Figure 21.5
भरद्वाज	Bharadwāja	Dorsal nucleus of the raphe	Figure 17.9
भरत	Bharat	Cingulate gyrus and the prefrontal area	Figure 7.12

भासी	Bhāsī	Vertebral artery	Figure 20.10
ब्राह्मा	Brahmā	The 4 heads of Brahmā correspond to the 4 lobes of the brain <sup>1</sup>	Figure 3.3
ब्राह्मलोक	Brahma-loka	Superior layer of the cerebral cortex	Figure 12.2
चमर	Chamara	Colic arteries	Figure 21.27
चित्रकूट	Chitrakūt (mountain range)	Pons	Figure 17.12
दक्ष	Daksha	Primordial cells	Figure 20.6
दक्ष असिकनी	Daksha and Asiknī, descendants of	The arterial tree in human physiology	Figure 21.38
दनु	Danu	Bronchial artery	Figure 21.12
दशग्रीद्वय	Dashagrīva (Rāvaṇ, having 10 heads)	The 10 lobes of the cerebellum	Figure 15.2
दशरथ	Dasharath	Midbrain	Figure 6.2
दशरथ कश्यप राम	Dasharath, Kashyap, and Rām	Evolution of the brain — sequential development of brainstem, midbrain and cortex	Figure 6.6
चर	Dasharath's informants	Sensory input systems	Figure 6.8
आमात्याः	Dasharath's ministers	Descending and ascending tracts of the nervous system	Figure 6.7
दशरथभार्याः	Dasharath's Patnī	The main arteries of the cerebrum	Figure 7.11
देद्वयद्वयार्शिनी	Devavārṇinī	Superior cerebellar artery	Figure 7.11 Figure 15.4
धृतराष्ट्री	Dhṛitarāshtrī	Internal thoracic artery	Figure 20.12
धर्मभृत्	Dharmabhṛit	Lateral reticular group of the medulla oblongata	Figure 17.17

धर्मदेह्यभार्याः	Dharmadev, 10 <i>Patnī</i> of	The 10 parietal arteries of the thoracic aorta	Figure 21.1
दिति	Diti	Left common carotid artery	Figure 21.38
द्रुमकुल्य	Drumakulya	Kidneys	Figure 15.15
दूषणा खर त्रिशिरस्	Dūṣhaṇa	Vestibulocerebellum (imbalanced function)	Figure 12.7 Figure 17.21
दुर्गा	Durgā	Vedic Devatā, impulse of Creative Intelligence of Natural Law, the energy and power value; sacrum and sacral nerves; white blood cells, immune system <sup>2</sup>	Figure 4.4
गन्धर्वा	Gandharvī	Gastroduodenal artery	Figure 21.23
गन्धर्वाः	Gandharvas	Autonomic ganglia around the heart	Figure 13.8
गङ्गा	Gangā	Cerebrospinal fluid	Figure 9.4 Figure 17.7
गङ्गा यमुना	Gangā - Yamunā (confluence)	The area of the cerebral aqueduct	Figure 17.10
गङ्गा सप्त स्रोतांसि	Gangāsapta (the 7 streams of Gangā)	The 7 structures of the ventricular system	Figure 9.5
गरुड	Garuda	The tissues of the lungs	Figure 16.3
गौतम	Gautam	A nucleus of the medulla oblongata	Figure 9.11
गोमती द्वेदश्रुति स्यन्दिका	Gomatī, Vedashruti, and Syandikā rivers	The middle, upper, and lower basilar venous plexus	Figure 17.6
गुह	Guha	Median raphe nucleus of the medulla oblongata	Figure 17.8
हनुमान्	Hanumān	Biochemical messengers, including hormones, neurotransmitters, etc.	Figure 13.1
हनुमान्	Hanumān	Hanumān bringing an entire Himālayan mountain covered with healing herbs	Figure 16.4 Figure 19.2



हनुमान्	Hanumān	Hanumān crossing the ocean from India to Lankā	Figure 19.3
हरी	Harī	Common and internal iliac artery	Figure 21.32
हिमालय	Himālayas (mountains and valleys)	Gyri and sulci of the cortex	Figure 16.5
हिरण्यकशिपु	Hiraṇyakashipu	Intermediate hemispheres of the cerebellum (early stage of development)	Figure 15.11
हिरण्याक्ष	Hiraṇyāksha	Vestibulocerebellum (early stage of development)	Figure 15.9
इलद्धघल द्वघातापि	Ilvala and Vātāpi	Digestive enzymes	Figure 12.3
इन्द्र	Indra	Mind	Figure 7.2
इन्द्रद्वष्टि	Indravṛishti (Indra's rain)	Pulmonary surfactant	Figure 20.18
इन्द्रजित्	Indrajit	Mind of the cerebellum (the essence of its function)	Figure 16.1 Figure 17.25
नगमयाः शराः	Indrajit's serpent arrows	Nerve cells (body and fibre)	Figure 16.2
इरा	Irā	Oesophageal artery	Figure 21.13
जटायु	Jatāyu	Circulating carrier proteins	Figure 12.4 Figure 17.19
जय	Jaya	Raphe nucleus	Figure 15.7
कबन्ध	Kabandha	Putamen and caudate nucleus (disturbed function)	Figure 12.9 Figure 17.23
कद्रू	Kadrū	Pulmonary artery	Figure 20.16
कद्रूनागसहस्राणि	Kadrū's 1,000 serpent sons	Bronchioles and alveoli	Figure 20.17
कैकसी	Kaikasī	Anterior inferior cerebellar artery	Figure 7.11 Figure 15.5
कैकेयी	Kaikeyī	Anterior cerebral artery	Figure 7.9 Figure 7.11 Figure 11.1

कालका	Kālakā	Inferior phrenic artery	Figure 21.18
देह्यदत्त	Kalki's horse	Hippocampus	Figure 9.9
कामदेह्य	Kāmadev	Nucleus accumbens and the medial forebrain bundle	Figure 8.2
कश्यप दशरथ राम	Kashyap, Dasharath, and Rām	Evolution of the brain — sequential development of brainstem, midbrain and cortex	Figure 6.6
कौसल्या	Kausalyā	Middle cerebral artery	Figure 7.8 Figure 7.11
खर दूषण त्रिशिरस्	Khara	Vestibulocerebellum (imbalanced function)	Figure 12.7 Figure 17.21
खसा	Khasā	Superior phrenic artery	Figure 21.16
क्रतु	Kratu	General somatic motor column of the brainstem	Figure 17.36
क्रौञ्ची	Kraunchī	Costocervical trunk	Figure 20.14
कृष्ण	Kṛishṇa*	Parietal lobe and sensory cortex in the brain <sup>3</sup>	
क्रोधद्वयशा	Krodhavashā	Abdominal aorta	Figure 21.17
क्रोधद्वयशापुत्रिका :	Krodhavashā, daughters married to Kashyap	Abdominal aorta, visceral branches	Figure 21.38
कुम्भकर्ण	Kumbhakarṇa	Fastigial nucleus of the cerebellum	Figure 15.14 Figure 17.26
लक्ष्मण	Lakshmaṇ	Occipital lobe	Figure 7.13
लक्ष्मी	Lakshmī (see Mahālakshmī)		
लक्ष्मी	Mahālakshmī	Vedic Devatā, impulse of Creative Intelligence of Natural Law, the nourishing and wealth giving value located in the heart	Figure 4.2
	Mahālakshmī	Heart (right and left side)	Figure 20.2

लक्ष्मी	(Rādhā and Ramā)		
लम्बा	Lambā	Fifth posterior intercostal artery	Figure 21.6
लङ्का	Lankā	Cerebellum	Figure 8.6
मन्थरा	Mantharā	A malformed cerebral vein	Figure 11.1
मारीच	Mārīcha (as a deer)	Angiogenesis factors	Figure 12.8 Figure 17.22
मारीच सुबाहु	Mārīcha and Subāhu	Inflammatory and growth factors	Figure 9.2
मारीचि	Marīchi	Special visceral motor column of the brainstem	Figure 17.30
मरुत्तुद्यती	Marutvatī	Sixth posterior intercostal artery	Figure 21.7
मातङ्गी	Mātangī	Renal artery	Figure 21.29
मृगी	Mṛigī	Inferior mesenteric artery	Figure 21.31
मृगमन्दा	Mṛigamandā	Superior mesenteric artery	Figure 21.24
मुहूर्ता	Muhūrtā	Eighth posterior intercostal artery	Figure 21.8
मुनी	Munī	Pericardial artery	Figure 21.14
नलसेतु	Nalasetu (bridge to Lankā)	Cerebellar peduncles	Figure 2.10 Figure 15.16
नरसिंह	Narasimha	Diencephalon	Figure 15.12
पञ्चाप्सरस	Panchāpsaras Lake	One part of the cerebrospinal fluid system	Chapter 17
परशुराम	Parashurām	Amygdala	Figure 10.2
परशुरामस्य परशु	Parashurām's axe	Corpus callosum	Figure 10.3
पाद्वर्धती	Pārvatī	Vedic Devatā, impulse of Creative Intelligence of Natural Law, the fundamental aspect of nature that	Figure 4.1

		gives structure and form (e.g. membranes of cell walls)	
पुलह	Pulaha	Special visceral sensory column of the brainstem	Figure 17.28 Figure 17.35
पुलस्त्य	Pulastya	General visceral motor column of the brainstem	Figure 15.1 Figure 17.34
राधा	Rādhā's crown	Right coronary artery	Figure 20.4
कृष्णस्य द्विहस्तौ	Rādhā's 2 hands	2 vena cava, superior and inferior (input to the right side of the heart)	Figure 20.2
राहु	Rāhu	Head of the caudate nucleus	Figure 19.1
राका	Rākā	Posterior inferior cerebellar artery	Figure 7.11 Figure 15.6
रमा	Ramā's crown	Left coronary artery	Figure 20.4
कृष्णस्य द्विहस्तौ	Ramā's 4 hands	4 pulmonary veins (input to the left side of the heart)	Figure 20.2
राम	Rām	Somato-sensory and supplementary sensory-motor cortex in the brain	Figure 6.1
राम दशरथ कश्यप	Rām, Dasharath, and Kashyap	Evolution of the brain — sequential development of brainstem, midbrain and cortex	Figure 6.6
रामशराः	Rām's arrows	The nerves in the pelvic area	Figure 21.37
रामशरः तूणीं पुनराद्विद्यशत्	Rām's arrow returns to the quiver	Nerve impulses, which activate the end organs of action (muscles, glands, blood vessels, etc.), resulting in sensory feedback to the brain as the basis for the next action	Figure 13.6
रामः ताटकाद्विद्यधम् करोति	Rām's battle with Tātakā	Rām's battle with Tātakā corresponds to the holistic functioning of the brain (Rām) balancing an inflammatory process in the pontine arteries (Tātakā), which was disturbing the olivary nucleus (Agastya) and the vestibular system (Vishwāmitra)	Figure 8.6

रामस्य भरतस्य शत्रुघ्नस्य च मातरः	Rām's mother and those of his three brothers	The main arteries of the cerebrum	Figure 7.11
राम	Rām's path during his exile	Different structures in the brainstem and cerebellum	Figure 17.1 Figure 17.3
राद्वद्यरा	Rāvaṇ	Lateral hemisphere of the cerebellum	Figure 17.27
दशग्रीद्वद्य	Rāvaṇ as Dashagrīva (having 10 heads)	The 10 lobes of the cerebellum	Figure 15.2
द्विद्वंशतिभुज	Rāvaṇ as Viṃshatibhuja (having 20 arms)	The 20 sublobes of the cerebellum	Figure 15.3
मातरः	Rāvaṇ's mother and the mothers of his sister and brothers	The main arteries of the cerebellum	Figure 7.11
ऋक्ष	Ṛiksha	Inferior pancreaticoduodenal artery	Figure 21.25
ऋक्षराज	Ṛiksharāj	Primordial cells (ascending and descending cell groups) of the pituitary gland	Figure 13.4
ऋश्रम	Ṛishis' Āshram	Brainstem	Figure 17.13
सप्तर्षयः	Ṛishis, Sapta Ṛishis (the 7 Ṛishis)	The 7 brainstem columns	Figure 17.29
ऋष्यशृङ्ग	Ṛishyashṛiṅga	Periaqueductal grey matter of the midbrain	Figure 7.5
रोहिणी	Rohiṇī	Hepatic artery	Figure 21.22
साध्या	Sādhyā	Middle (seventh posterior) intercostal artery	Figure 21.3
	Sāgar (ocean)	Cerebrospinal fluid of the fourth	Figure 15.17

सागर		ventricle	
सगर	Sagar, King	Pons and medulla oblongata	Figure 9.6
षष्टिः पुत्रसहस्राणि सगरस्य	Sagar, the 60,000 sons of King Sagar	The sensory fibres projecting up to the cortex	Figure 9.10
सप्त साल	Sāl Trees (7)	The 7 columns of the brainstem	Figure 13.5
सम्पाति	Sampāti	Fixed carrier proteins	Figure 12.5
संकल्पा	Sankalpā	Ninth posterior intercostal artery	Figure 21.9
सप्तर्षयः	Sapta Ṛishis (the 7 Ṛishis)	The 7 brainstem columns	Figure 17.29
सरस्वद्धृती	Saraswatī	The 4 arms of Saraswatī ( <i>Prakṛiti</i> of Brahmā) correspond to the 4 lobes of the brain. <sup>4</sup>	Figure 4.3
सरयु	Sarayu River	Superficial middle cerebral vein	Figure 6.3
सती	Satī	Median sacral artery; original stem cell	Figure 21.35
शबला	Shabalā	Medial forebrain bundle and mammillary bodies	Figure 10.1
शरभङ्ग	Sharabhanga	Central reticular group of the medulla oblongata	Figure 17.15
शार्दूली	Shārdūlī	Suprarenal artery	Figure 21.28
शत्रुघ्न	Shatrughna	Temporal lobe	Figure 7.14
शिद्धद्य	Shiva	Vedic Devatā, the Wholeness of Natural Law available in complete, full silence; Shiva in the form of a Lingam corresponds to the entire brain. <sup>5</sup>	Figure 3.1 Figure 4.1
शिद्धद्य पाद्धर्घती	Shiva and Pārvatī ( <i>Purusha</i> and <i>Prakṛiti</i> )	The silent reality at the basis of creation, empty space and the force that captures and quantifies space: in the physiology the gaps and the membranes that structure and compartmentalise the gaps	Figure 4.1
	Shiva's Bow	Vertebral column	Figure 9.3



शिद्धद्यधनुस्			
तृतीय चक्षस्	Shiva's third eye	Pineal gland	Figure 8.3
शूर्पणखा	Shūrpaṇakhā	Labyrinthine artery (disturbed function)	Figure 12.6 Figure 17.20
शुकी	Shukī	Thyrocervical trunk	Figure 20.13
श्वेता	Shwetā	External iliac artery	Figure 21.33
श्येनी	Shyenī	Axillary artery	Figure 20.11
सिंहिका	Simhikā	A structure that blocks transmitters or cofactors	Figure 14.1
सृमर	Sṛimara	Ileal and jejunal arteries	Figure 21.26
सुबाहु मारीच	Subāhu and Mārīcha	Inflammatory and growth factors	Figure 9.2
सुग्रीद्वघ	Sugrīva	Anterior pituitary gland	Figure 13.2
सुमन्त्र	Sumantra	Interpeduncular nucleus in the midbrain	Figure 7.4 Figure 17.4
सुमित्रा	Sumitrā	Posterior cerebral artery	Figure 7.10 Figure 7.11
सुरभी	Surabhī	Common hepatic artery	Figure 21.21
सुरसा	Surasā	Splenic artery	Figure 21.20
सुतीक्ष्ण	Sutīkshṇa	Paramedian reticular nuclei	Figure 17.16
स्वद्ययम्प्रभा	Swayamprabhā	Cofactors and stimulating factors of the immune system	Figure 13.10
स्यन्दिका गोमती द्वद्येदश्रुति	Syandikā, Gomatī, and Vedashruti Rivers	The lower, middle, and upper basilar venous plexus	Figure 17.6
तमसा	Tamasā River	The basal vein at the base of the brain	Figure 17.5
ताम्रा	Tāmrā	Subclavian artery	Figure 20.9
तारा	Tārā	Veins and arteries of the portal system	Figure 13.9

ताटका	Tātakā	Disturbed functioning of a pontine artery (inflammation)	Figure 8.5 Figure 8.6
त्रिशिरस् खर दूषणा	Trishiras	Vestibulocerebellum (imbalanced function)	Figure 12.7 Figure 17.21
द्वघाली	Vālī	Posterior pituitary gland and pituitary stalk	Figure 13.3
द्वघाल्मीकि	Vālmiki	Pontine reticular formation, the nucleus raphe pontis	Figure 17.11
द्वघामन	Vāman	Motor cortex	Figure 9.1
द्वघराह	Varāha	Brainstem	Figure 15.10
द्वघसिष्ट	Vasishtha's first incarnation	General somatic sensory column of the brainstem	Figure 7.1 Figure 17.31
द्वघसिष्ट	Vasishtha's third incarnation	Globus pallidus	Figure 7.3
द्वघसु	Vasu	Tenth posterior intercostal artery	Figure 21.10
द्वघातापि इल्लद्वघल	Vātāpi and Ilvala	Digestive enzymes	Figure 12.3
द्वघेदश्रुति गोमती स्यन्दिका	Vedashruti, Gomatī, and Syandikā rivers	The upper, middle, and lower basilar venous plexus	Figure 17.6
द्विघभीषण	Vibhīshaṇ	Dentate nucleus of the cerebellum	Figure 17.24
द्विघभाण्डक	Vibhāṇḍak	Grey matter of the pons	Figure 7.7
द्विघजय	Vijaya	Locus caeruleus	Figure 15.8
द्विघनता	Vinatā	Pulmonary veins	Figure 20.15
द्विघराध	Virādha	Autonomic ganglia around the heart (disturbed activity)	Figure 12.1 Figure 17.14
द्विघष्णु	Vishṇu	the quality of absolute dynamism of Natural Law, and all dynamism in the physiology <sup>6</sup>	Figure 3.2
	Vishwā	Eleventh posterior intercostal	Figure 21.11

द्विद्यश्वा		artery	
द्विद्यश्वामित्र	Vishwāmitra	Vestibular system	Figure 8.1 Figure 8.6
यामी	Yāmī	Subcostal artery	Figure 21.2
प्रयाग	Yamunā Gangā confluence: <i>Prayāg</i>	The area of the cerebral aqueduct (cerebrospinal fluid)	Figure 17.10

## Overview Charts (Rāmāyaṇ and Maharishi's Vedic Science)

Title	Caption	Figure
40 Aspects of Veda and the Vedic Literature	The "Managing Intelligence" of nature at the basis of the structures and functions of the human physiology	Figure 1.5
Apaurusheya Bhāshya	Maharishi's commentary on Rk Veda Saṁhitā bringing to light the mechanics of evolution of Natural Law	Figure 1.3
Arterial tree	The Arterial Tree of the Aorta and the Family Tree of Asīkni	Figure 21.38 Figure 21.39
Maharishi Technology of the Unified Field (Transcendental Meditation)	Objective and subjective approach (unification of the four fundamental forces of nature and direct experience of the Unified Field)	Figure 1.6
Natural Law	The origin of law and its evolution	Figure 1.2
Path of Rām (India)	The Path of Rām in India During His Exile	Figure 17.1 Figure 17.2
Path of Rām (Physiology)	The Path of Rām in the Brainstem and the Cerebellum	Figure 17.1 Figure 17.3
Rāmāyaṇ, elements and realms: Heaven, Ṛishis, Humanity, and Earth	Head, neck, chest and upper arms, diaphragm and abdomen	Figure 5.1
Ṛishis in the brainstem	The <i>Ṛishis</i> in the Brainstem (including the <i>Sapta Ṛishis</i> )	Figure 17.28 Figure 17.29
Unified Field	Unification of the four fundamental forces of nature	Figure 1.1
Unified Field chart for physiology	The sequential expression of knowledge and organizing power from the Unified Field displayed in several hierarchical levels.	Figure 2.2
The structuring dynamics of the gap	The four stages of the transformation of one sound into another within the silent gap between them	Figure 1.4 Figure 9.8
Yoga Sūtra	Cortical gyri (folds) connected by association fibres	Figure 2.9
Yoga Sūtra <i>Chatur Pādāḥ</i> (four chapters)	The four cortical lobes of the brain	Figure 2.8

## Anatomical Illustrations

Title	Caption	Figure
Arteries	Arterial system	<a href="#">Figure 20.1</a>
Cell	A cell with its main internal parts	<a href="#">Figure 2.3</a>
Cell	Cell division	<a href="#">Figure 2.4</a>
Circulatory system	The two main branches of the circulatory system are the arterial system and the venous system. Together they form two connecting loops (pulmonary and systemic circulation)	<a href="#">Figure 2.6</a>
DNA	The double helix of the DNA	<a href="#">Figure 2.1</a>
Embryonic layers	The entire physiology emerges from three embryonic layers	<a href="#">Figure 2.5</a>
Neuron	The structure of a neuron (saltatory conduction along the axon)	<a href="#">Figure 2.7</a>

### ***Footnotes***

1. See also figure 161 in *Human Physiology: Expression of Veda and the Vedic Literature*.
- 2 See also figure 157 in *Human Physiology: Expression of Veda and the Vedic Literature*.
- 3 See also figure 157 in *Human Physiology: Expression of Veda and the Vedic Literature*.
- 4 See also figure 163 in *Human Physiology: Expression of Veda and the Vedic Literature*.
- 5 See also figures 123-132 in *Human Physiology: Expression of Veda and the Vedic Literature*.
- 6 See also figure 141-144 in *Human Physiology: Expression of Veda and the Vedic Literature*.

## Appendix III

### A Glimpse of Maharishi's Achievements 1957–2008, and continuing to the present

**H**IS HOLINESS MAHARISHI MAHESH YOGI, founder of Transcendental Meditation<sup>1</sup> and the worldwide Spiritual Regeneration Movement (1957), introduced research in the field of consciousness and brought to light seven states of consciousness (1957–1967); created a new science—the Science of Consciousness, the Science of Creative Intelligence—and trained 2,000 teachers<sup>2</sup> of this science [by now well over 20,000] (1972), inaugurated the World Plan<sup>3</sup> to solve the age-old problems of mankind in this generation (1972); discovered the Constitution of the Universe, the lively potential of Natural Law in R̥k Veda, and discovered the structuring dynamics of R̥k Veda in the entire Vedic Literature (1975); and celebrated the Dawn of the Age of Enlightenment on the basis of the discovery of the *Maharishi Effect* (1975).

Maharishi created a World Government for the Age of Enlightenment with its sovereignty in the domain of consciousness and authority in the invincible power of Natural Law; introduced the Transcendental Meditation Sidhi Programme and the experience of bubbling bliss in Yogic Flying to create supreme mind-body coordination in the individual and coherence in world consciousness (1976); formulated Maharishi's Absolute Theory of Government, Maharishi's Absolute Theory of Education, Maharishi's Absolute Theory of Health, Maharishi's Absolute Theory of Defence, Maharishi's Absolute Theory of Economy, Maharishi's Absolute Theory of Management, and Maharishi's Absolute Theory of Law and Order to raise every area of life to perfection (1977); brought to light the commentary of R̥k Veda, *Apaurusheya Bhāshya*, as the self-generating, self-perpetuating structure of consciousness (1980); and organized the centuries-old scattered Vedic Literature as the literature of a perfect science—Maharishi's Vedic

Science and Technology (1981).

Maharishi brought to light the full potential of Āyur-Veda, Gāndharva Veda, Dhanur-Veda, Sthāpatya Veda, and Jyotish to create a disease-free and problem-free family of nations (1985); formulated the Master Plan to Create Heaven on Earth for the reconstruction of the whole world, inner and outer (1988); brought to light Supreme Political Science to introduce Automation in Administration and create conflict-free politics and a problem-free government in every country; inspired the formation of a new political party, the Natural Law Party, in countries throughout the world to enrich and support national law with Natural Law, and in this way promoted a practical procedure to actualize his Absolute Theory of Government (1992).

In 1993 Maharishi inaugurated Global ***Raam Raj***—Global Administration through Natural Law, and brought to light the correlation between the structure and qualities of the Veda and Vedic Literature and the structure and function of the human physiology, which established the grand unity of all material diversity of creation—of all sciences and of all religions (last quarter 1993). This has heralded the Dawn of the Vedic Civilisation, civilisation based on pure knowledge and the infinite organising power of Natural Law—life according to Natural Law—where no one will suffer; all will enjoy the eternal glory of God—Heaven on Earth.

Maharishi established Maharishi Vedic Universities and Maharishi Āyur-Veda Universities and Maharishi Colleges of Perfect Health throughout the world to offer mastery over Natural Law to every individual, and to perpetuate life in accordance with Natural Law—perfection in every profession—and create Natural Law based problem-free government in every country—governments with the ability to prevent problems (1994).

Maharishi introduced programmes for prevention in the fields of health and security, to create healthy national life and an invincible armour of defence for the nation, by introducing new prevention-oriented programmes of Maharishi Āyur-Veda—Maharishi's Vedic Medicine—for perfect health, and



by introducing the programme for a PREVENTION WING in the military of every country to disallow the birth of an enemy just by training a small percentage of the military in the Vedic Technology of Defence—the Transcendental Meditation and Transcendental Meditation Sidhi Programme including Yogic Flying (1994).

Maharishi established Maharishi University of Management in the USA, Japan, Holland, and Russia to eliminate the problems of management and improve the health, creativity, and good fortune of management everywhere. Maharishi University of Management offers practical programmes to prevent and eliminate problems of public administration by bringing the support of Natural Law to national law (1995). Introduction of the knowledge of Natural Law in every field of management will actualize the evolutionary direction for every area of human concern.

The Maharishi Corporate Development Programme was introduced in companies in the USA, Europe, India, and Australia to restore profitability and vitality to failing industries, and improve the performance of successful organizations (1995).

Maharishi started to train teachers of Vedic Science, which means those who will have the ability to impart Total Knowledge—experience of *Ātmā*, the Self, and understanding this experience through the Veda—making the experience of Total Knowledge and its infinite organising power lively within the awareness of everyone and within the physiology of everyone (1996). Maharishi offered new principles and new programmes to enrich national law in all countries with the nourishing influence of Natural Law (1997).

On 10 June 1998, Maharishi inaugurated Maharishi Veda Vision—the Maharishi Channel—as the expression of the natural desire of the wise throughout the ages to create perfection in life and totally eliminate suffering—to bring the joy of ‘Heaven on Earth’ to every individual and every nation in the world.

One Maharishi Channel very quickly expanded into a global network of eight satellite transmissions, and Maharishi Open University was inaugurated on 2 August 1998, bringing the total knowledge of Natural Law to every country, broadcasting in twenty different languages from Maharishi Vedic University in the land of WHOLENESS—Holland.

The laying of the foundation stone of the World Centre for Vedic Learning and Maharishi Vedic Vishwa Prashāsan Rāja dhānī—the World Capital of Maharishi’s Global Administration through Natural Law—took place at the *Brahma-Sthān* (geographical centre) of India on 6 November 1998.

During the first quarter of 1999, Maharishi re-established throughout India, in small villages and towns, the ‘one Guruji system’, according to the tradition of Vedic Education, giving the opportunity to thousands of students to gain Total Knowledge.

Maharishi introduced his Programme to Eliminate Poverty in the world through the development of unused agricultural lands, using healthy Vedic and organic farming principles and practices. On 7 October 2000, Maharishi founded the Global Country of World Peace under the leadership of Maharaja Adhiraj Raja Raam<sup>4</sup> to unite all nations in a peaceful, global unity. On 22 October 2000, Maharishi inspired the foundation of the World Federation of Traditional Kings to awaken the parental role of the leaders of the traditional cultures in the world to maintain peace in their areas of influence (2000).

Maharishi’s global initiative for permanent world peace was launched in response to the outburst of terrorism in the USA. Programmes were designed to create a permanent influence of world peace from one country—India—through the performance of Yoga and Yagya (Vedic Procedures to restore balance in Nature and change the course of destiny) by thousands of Vedic Pandits (2001); Maharishi designed the Raam Mudra development currency to create a balanced world economy; began to offer Total Knowledge and prevention-oriented solutions to the world through a continuum of weekly global press conferences that were to continue for six years; conducted

special one-month Enlightenment Conferences; and launched his Global Health Programme—a computerized programme based on Maharishi’s Vedic Medicine for prevention, cure, and the creation of a disease-free society (2002).

Maharishi welcomed every government to contract with the Global Country of World Peace, to create prevention-oriented, problem-free administration, and made an offer to every government to train their administrators to engage in their administrative policies and programmes the intelligence and energy of total Natural Law—the Light of God—the Will of God—which governs the universe with perfect order.

To ensure achievement of the long-sought goal of mankind—permanent world peace—Maharishi launched a programme to establish the largest group of Vedic Pandits in India, ‘*permeating all time and all space values with harmony, with evenness of higher intelligence*’ through recitation of the Veda and programmes of Vedic Yagya. Maharishi also launched a global initiative to build Peace Palaces in the 3,000 largest cities of the world, ‘*to perpetuate the knowledge that has proven itself to be complete knowledge of the nature of man*’ (2003–2004).

Maharishi’s Consciousness-Based Education received worldwide recognition for its profound benefits to student well-being, and Maharishi addressed education conferences in Los Angeles, New York, and Washington, DC, USA, and explained that ‘*Transcendental Meditation is a natural way to fathom the Unified Field, to develop the whole brain to function in every thought, speech, and action, and promote excellence in one’s personal and professional life.*’ Maharishi established the Parliament of World Peace to set forth a system of administration that will harmonise the differences that dominate relationships between nations, and to take all systems of administration to the supreme level—the Will of God—available in the *Ātmā*, the Self, of everyone. Maharishi began to train Raam Raj Administrators to administer society from the level of enlightenment for all

times to come (2004).

Maharishi inaugurated the Dawn of ***Sat-Yuga***—the dawn of civilisation based on pure knowledge and the infinite organising power of Natural Law, where no one will suffer; all will enjoy the eternal glory of God—Heaven on Earth. Maharishi completed the first two Raam Raj Administrator Training Courses. Its graduates, Raam Raj Administrators, will guide mankind through the silent administration of Total Knowledge and Total Action. Maharishi inspired builders on all continents to reconstruct the whole world in the light of the principles of Vedic Architecture—city and country planning in harmony with Natural Law ([www.globalreconstruction.org](http://www.globalreconstruction.org)). Maharishi University of World Peace was founded, with headquarters in Geneva, Switzerland, to bring the complete knowledge of Natural Law to everyone and create lasting world peace (2005).

Maharishi began to raise whole nations to Invincibility and opened the gateway for the reconstruction of the whole world—‘***reconstruction of the physical world, reconstruction of the mental world, reconstruction of the intellectual world—to the exalted state of the spiritual value of life, which is bliss eternal.***’—Maharishi

Maharishi’s Parliament of World Peace convened in the ***Brahma-Sthān*** (geographical centre) of India and in MERU, Holland, for twelve sessions of 144 presentations, from 5 February to 23 March 2006, broadcast worldwide. The focus of these sessions was national invincibility in reference to the twelve disciplines of Maharishi’s Vedic Science, the Science of Consciousness.

Maharishi permanently established the Invincible America Assembly with over 2,000 participants—experts in Yogic Flying, including over 1,000 Vedic Pandits from India—and inaugurated a new initiative to establish ‘Invincibility Schools’ around the world, where students practise Yogic Flying before morning and after evening classes, to maintain a high level of harmony and integration in national consciousness.

Maharishi guided development of the curriculum for Vedic Medicine to be the foundation for the perfect health of civilisation. The central point of Maharishi Vedic Medicine is that the experience of *Ātmā*—the silent field of the Self—restores balance to the whole physiology (2006).

Maharishi formulated a seven-point programme to crown every nation with Invincibility: 1. Establish large groups of Vedic Pandits and Yogi Flyers in every country; 2. Provide prevention-oriented, problem-free administration; 3. Construct Vedic Medical Colleges in every country to create a disease-free society; 4. Construct universities, colleges, and schools that offer total knowledge of Natural Law; 5. Produce healthy food for happy life through Vedic Organic Agriculture; 6. Design cities and countries according to the principles of Maharishi Vedic Architecture in harmony with Natural Law; 7. Eliminate poverty in the world. Having done complete justice to the teachings of Shri Guru Dev<sup>5</sup> for over fifty years, which has secured Invincibility for every nation, Maharishi inaugurated Administration through Silence, which will forever guide the destiny of the world through the Total Knowledge Based principles of the Vedic Tradition of Masters (2007).

On 12 January 2008 Maharishi inaugurated the Year of Invincibility—Global *Raam Raj*—celebrating the success of 50 years of his worldwide Movement, active in over 100 countries to date.

Maharishi's global plan for the spiritual regeneration of the whole human race is the greatest fortune of the world for all time. It is bringing day by day the rising sunshine of *Sat-Yuga*. Maharishi has given the gift of enlightenment to millions of people and trained thousands to keep this bright light of Total Knowledge shining for generations to come. Maharishi's gift to the world, to all mankind, is the perpetual light of Total Knowledge fully awake in every heart and home. Maharishi's achievements will continue to unfold, and through the Grace of Guru Dev we will continue to celebrate every year, and year after year, and generation after generation Maharishi's achievements, as the evolving trends of time bring forth the full sunshine of

## Heaven on Earth—Raam Raj (2008 continuing).

### *Footnotes*

1. By 2011 over six million people throughout the world have learnt Transcendental Meditation.
2. Teachers of Transcendental Meditation
3. The seven goals of the World Plan are: 1. To develop the full potential of the individual; 2. To improve governmental achievements; 3. To realize the highest ideal of education; 4. To solve the problems of crime, drug abuse, and all behaviour that brings unhappiness to the family of man; 5. To maximize the intelligent use of the environment; 6. To bring fulfilment to the economic aspirations of the individual and society; 7. To achieve the spiritual goals of mankind in this generation.
4. Professor Tony Nader, MD, PhD, whose research on Veda in human physiology brought to light that consciousness is the structuring intelligence and basic content of all physiological structures in creation, was honoured by Maharishi with the leadership role to create an ideal administration for every country, whereby national law will be upheld by Natural Law, bringing invincibility to every nation.
5. Maharishi's teacher, His Divinity Brahmanand Saraswati, Jagadguru Shankaracharya of Jyotir Math, Badrikāshram, Himālayas, is the revered embodiment of Vedic Wisdom in the great Tradition of Vedic Masters, who have passed down the eternal wisdom of integration of life from teacher to student since time immemorial.





# Glossary

***Amṛit*** – the ‘nectar of life’. The Purāṇ tell how the *Devatās* wished for immortality, and so Lord Viṣṇu suggested that they churn the ocean of milk in order to acquire the *Amṛit*, through which they could attain eternal life. Together the *Devatās* and *Asuras* churned the ocean, and with the help of Mount Mandara as a churning rod, the snake Vāsuki as the rope, and placed on top of the tortoise Kūrma (an *Avatār* of Viṣṇu), they were able to extract the *Amṛit*.

***Anyonya-Abhāva*** – the third stage in the transformation of one Vedic Sound into another within the gap between them. *Anyonya-Abhāva* is the unmanifest dynamism of Total Natural Law lively within *Atyanta-Abhāva*.

***Apaurusheya Bhāshya*** – (See Maharishi’s *Apaurusheya Bhāshya*.)

***Āshram*** – the forest dwellings of *Rishis*, ascetics, and other seekers of enlightenment.

***Ātmā*** – the infinite, eternal field of pure intelligence, which is the most fundamental level of Natural Law, the Unified Field of all the Laws of Nature and the inner Self of everyone. It is synonymous with Being, pure consciousness, and pure intelligence.

***Atyanta-Abhāva*** – the silent state of Veda, and the second stage in the transformation of one Vedic Sound into another within the gap between them.

***Avatār*** – an incarnation of a principal *Devatā*, who comes to Earth in order to fulfil a specific task such as the protection of the righteous or the destruction of evil.

***Ayodhyā*** – the capital city of Rām’s kingdom, but often referring to the entire kingdom. Physiologically it initially indicates the area of the midbrain

where Dasharath is located, but it increasingly includes other parts of the body as Rām's administration extends to those areas, ultimately corresponding to the whole physiology.

**Being** – the omnipresent, eternal field of pure intelligence that underlies and permeates creation. It is the Unified Field of all the Laws of Nature, and is synonymous with *Ātmā*, pure consciousness.

**Brahm** – Totality, Wholeness, Rām.

**Brahma-loka** – the highest heaven, corresponding to the superior layers of the cerebral cortex.

**Brāhmaṇa** – the division of society associated with teaching, learning, and knowledge.

**Brahmananda Saraswati** – Guru Dev, Maharishi's Master, who was the most recent custodian of the Vedic Tradition of knowledge. It is in his name that Maharishi brought the Vedic Knowledge to every corner of the earth, and in his name that Maharishi spent over fifty years travelling, teaching, and developing programmes for unfolding the total potential of every individual and every society.

**Brāhmaṇa** – the gaps between the Vedic Sounds, which contain the liveliness of self-referral intelligence, the total potential of Veda—total knowledge of Natural Law, lively in its full potential.

**Chhandas** – the known within the self-interacting dynamics of consciousness. Maharishi explains that pure consciousness is a field of infinite wakefulness, an ocean of pure Being. Because it is awake, it is awake to itself—awake to its eternal, infinite status. Being awake to itself, it spontaneously recognizes that it is the Ṛishi (knower), Devatā (process of knowing) and Chhandas (the known)—subject, object, and that which connects the subject to the object.

**Collective Consciousness** – the wholeness of consciousness of any specific group. In Maharishi’s words, ‘when we talk of community consciousness, we merely put together the consciousness of all the individuals who make up the community, or the nation.’ There are innumerable organizations of collective consciousness, among which are family consciousness, city consciousness, provincial consciousness, national consciousness, and world consciousness.

**Constitution of the Universe** – the self-interacting dynamics of the Unified Field, constituting the most basic level of Nature’s dynamics. Just as a nation’s constitution represents the most fundamental level of national law, the laws governing the self-interacting dynamics of the Unified Field represent the most fundamental level of Natural Law, the source of all the Laws of Nature governing the universe.

**Cosmic Consciousness** – the fifth state of consciousness, characterized by infinite, unbounded awareness along with the experience of the outer, changing world. It is a state of infinite bliss, eternal freedom, and unbounded awareness.

**Devatā** – the process of knowing within the self-interacting dynamics of consciousness. Maharishi explains that pure consciousness is a field of infinite wakefulness, an ocean of pure Being. Because it is awake, it is awake to itself—awake to its eternal, infinite status. Being awake to itself, it spontaneously recognizes that it is the Ṛishi (knower), Devatā (process of knowing) and Chhandas (the known)—subject, object, and that which connects the subject to the object.

**Devatās** – the Laws of Nature that organize and administer every part of creation and maintain it in perfect order. The *Devatās* have been located in the structure and function of human physiology.

**Dharma** – Natural Law, the invincible power of Nature that upholds life, maintaining evolution on every level.

**Gandharvas** – celestial singers and musicians.

**Gaps** – Maharishi explains that Veda is not only comprised of sound —*Mantra*—but also of the gaps between the sounds. In the Vedic Literature these gaps are described as *Brāhmaṇa*. In the flow of the Vedic Sounds, each sound ‘collapses’ into the silent gap, and from the gap a new sound emerges. It is within this silence that the transformation from one sound to the next takes place. (See also *Pradhwaṁsa-Abhāva*, *Anyonya-Abhāva*, *Atyanta-Abhāva*, and *Prāg-Abhāva*.)

**Global Country of World Peace** – founded by Maharishi to ‘provide a global home for peace-loving people everywhere’. It is a non-political, non-religious global organization that does not usurp or replace the functions of existing governments. Its purpose is to enliven the total potential of Natural Law in the awareness of every individual and in the collective consciousness of every nation.

**God Consciousness** – the sixth state of consciousness, in which one’s perception has become so refined as to experience the finest, celestial, level of creation.

**Guru Dev** – Brahmānanda Saraswatī, Maharishi’s Master. Guru Dev was the most recent custodian of the knowledge of the Vedic Tradition, and it was in his name that Maharishi brought the Vedic Knowledge to every corner of the earth, and in his name that Maharishi spent over fifty years travelling, teaching, and developing programmes for every individual and every nation to rise to perfection.

**Holy Tradition of Vedic Masters** – the eternal Vedic tradition, which has maintained and preserved the Vedic Knowledge in its purity and integrity throughout the ages.

**Jyotish** – Vedic Astrology, the science of prediction, which reveals the relationship between individual life and cosmic life. When used in

conjunction with the Maharishi Yagya program, it can help avert problems and difficulties before they arise, and take advantage of the fortunate periods in the future.

**Kāṇḍ** – chapter or section. In the Vālmīki Rāmāyaṇ there are seven *Kāṇḍas*: *Bāl Kāṇḍ*, the story of Rām’s youth; *Ayodhyā Kāṇḍ*, Rām’s early years in the capital city of Ayodhyā; *Āraṇya Kāṇḍ*, the forest chapter including the first years of Rām’s exile; *Kishkindhā Kāṇḍ*, which describes events in the land called Kishkindhā; *Sundar Kāṇḍ*, the ‘beautiful chapter’ in which Hanumān locates Sītā in Lankā; *Yuddha Kāṇḍ*, the chapter of the great battle; and *Uttar Kāṇḍ*, the final chapter.

**Karma** – literally ‘action’. The law of *Karma* stipulates that every action returns in kind to the doer, or in other words, ‘as you sow, so shall you reap’.

**Kshatriya** – the division of society that protects the citizens and administers the government. It includes warriors as well as government officials.

**Lankā** – the island kingdom of the *Rākshasas*, to which Rāvaṇ took Sītā after abducting her from Rām. Rām and his army of *Vānara* subsequently arrived at the ocean shore, built a bridge across the water to Lankā, and re-captured Sītā while destroying the *Rākshasa* army.

**Laws of Nature** – the inviolable principles of Nature’s functioning, which create and maintain the vast, ever-expanding universe.

**Maharishi Āyur Veda** – Maharishi Āyur-Veda is the ancient and timeless Vedic approach to medicine, brought to light by Maharishi, in conjunction with the world’s foremost experts in Ayurvedic Medicine and experts in modern medicine. It is a natural, prevention-orientated system of medicine, free from negative side effects; it is primarily Consciousness-Based Medicine, founded on the recent scientific discovery that consciousness is at the basis of the physiology.

**Maharishi Sthāpatya Veda** – Vedic Architecture, the science of building homes, offices, and communities in accord with Natural Law. Buildings constructed using the principles of Maharishi Sthāpatya Veda promote the health, fortune, and wellbeing of those living or working within them.

**Maharishi's *Apaurusheya Bhāshya* of Ṛk Veda** – the commentary of Veda upon itself. It is the eternal flow of Veda in which every sound, every expression, is an elaboration upon the preceding; each unit of sound in the sequential unfoldment of sound is a complete structure of total Natural Law, illustrating the formation of Natural Law as it sequentially evolves.

***Maṇḍala*** – one of the ten major divisions of Ṛk Veda, the first and most important aspect of the Vedic Literature. It also refers to a circular structure.

***Mantra*** – Vedic Sounds used to gain the support of Natural Law. Some are used to take the awareness inward to experience pure Being, while others are employed in Vedic Yagya.

***Moksha*** – a name for the state of enlightenment that highlights the quality of freedom.

***Nalasetu*** – the bridge built for Rām between India and Lankā.

**Natural Law** – the collection of inviolable principles of Nature's functioning, which create and govern the universe.

***Patnī*** – usually translated 'wife', but its more profound sense indicates the relationship and interaction of different structures and functions of Natural Law. In the physiology *Patnī* refers to a specific aspect of intelligence with a nourishing and supporting quality, such as a blood vessel that nourishes a vital organ.

***Pradhwaṁsa-Abhāva*** – the first stage of transformation of one Vedic Sound into another within the gap. In this stage the initial sound collapses, or dissolves, into the gap.



***Prāg-Abhāva*** – The fourth stage in the transformation of one sound into another within the gap between two Vedic Sounds. *Prāg-Abhāva* is the emergence of the next sound, which takes place from within *Atyanta-Abhāva* through the quality of *Anyonya-Abhāva*, which maintains the link between the previous sound and the one that is emerging. This link, which is a fine level of unmanifest memory, maintains the perfect order of Natural Law in the sequential flow of the Vedic Sounds.

***Rākshasa*** – a kind of demon or evil creature. In the physiology, a *Rākshasa* corresponds to either a diseased part of the body, or else an abnormal cell or group of cells, such as a tumour.

***Rākshasī*** – a female *Rākshasa*.

**Rām Charit Mānasa** – a 16th century version of the Rāmāyaṇ by Goswāmī Tulsīdās, which Maharishi often cited.

***Ṛichā*** – the verses of the Veda, which express the dynamics that structure all the Laws of Nature.

***Ṛiksha*** – bear-like beings who fought alongside the *Vānara* helping Rām conquer Lankā.

***Ṛishi*** – the knower within the self-interacting dynamics of consciousness. Maharishi explains that pure consciousness is a field of infinite wakefulness, an ocean of pure Being. Because it is awake, it is awake to itself—awake to its eternal, infinite status. Being awake to itself, it spontaneously recognizes that it is the *Ṛishi* (knower), *Devatā* (process of knowing) and *Chhandas* (the known)—subject, object, and that which connects the subject to the object.

***Ṛishis*** – the Seers of Veda, who experience the Vedic Sounds within their own self-referral consciousness. The *Ṛishis* are also the enlightened custodians and teachers of Vedic Knowledge, who guide and teach the people, especially the kings. They are a source of great wisdom for every area

of life.

***Sandhi*** – (see gaps)

***Sapta Rishis*** – the seven principal *Rishis*, present in the physiology as the seven longitudinal columns of the brainstem. They also correspond to the seven stars of the big dipper—or big bear (Ursa Major).

***Sarga*** – a subdivision of a *Kāṇḍ*.

**Self** – the infinite, unbounded ocean of pure consciousness within every individual.

**Self-Interacting Dynamics of Consciousness** – the dynamics through which the silent, eternal ocean of consciousness moves within itself and expresses itself as Vedic Sound. Through these dynamics, *Ātmā* expresses itself as Vedic Sound, the Vedic Sounds unfold into matter—the universe including human physiology—and the human physiology, which is made of the sounds of Veda and the Vedic Literature, realizes its total potential in the unfoldment of Totality, *Brahm*.

***Sharīr*** – Sanskrit term meaning ‘body’ or ‘physiology’.

***Shruti*** – the sound of self-reverberating consciousness, the eternal process of Unity transforming into diversity and diversity into Unity. These sounds construct self-referral consciousness, and are available to anyone within their own Self.

***Shudra*** – the division of society that includes the servants.

**TM-Sidhi Programme** – an advanced aspect of Transcendental Meditation. During Transcendental Meditation, the awareness settles to its simplest state, the field of pure consciousness, *Ātmā*. The TM-Sidhi programme enables one to project thought from that most refined level of awareness, in this way becoming conversant with that level of intelligence from which all the Laws

of Nature function.

**Transcendental Consciousness** – the fourth state of consciousness, in which one experiences the inner reality of one’s own life, the source of thought, an infinite, eternal, silent field of pure wakefulness, beyond time, space, and causation.

**Transcendental Meditation** – a simple, effortless meditation technique that is practised twice daily sitting comfortably with the eyes closed. During the practice, the awareness settles to its quietest state, Transcendental Consciousness, an infinite, unbounded, reservoir of energy, creativity, intelligence, and bliss. Through the regular practice of this Vedic technology of consciousness, one automatically and spontaneously grows toward higher states of consciousness.

**Tulsīdās, Goswami** – author of the Rām Charit Mānasa, a popular version of the Rāmayaṇ from the 16<sup>th</sup> century.

**Unity Consciousness** – the seventh state of consciousness, in which one experiences every object of perception as an expression of one’s own infinite Self. In Unity Consciousness, the infinite Self that was experienced in Cosmic Consciousness is perceived on the surface level of life, in every object of experience.

**Vānara** – the name of a race of monkey-like beings inhabiting Kishkindhā. Vast armies of *Vānara* assisted Rām in locating and freeing Sītā, and in destroying the *Rākshasa* army.

**Veda** – the self-interacting dynamics of consciousness. Veda is not a collection of man-made texts, but is the dynamic interaction of self-referral consciousness within itself, constituting all the unmanifest sounds—*Shruti*.

**Vedic Cognition** – the *Ṛishis*’ direct experience of the reverberations of Natural Law within *Ātmā*.

**Vedic Devatās** – the Laws of Nature that organize and administer every part of creation and maintain it in perfect order. The *Devatās* have been located in the structure and function of human physiology.

**Vedic Literature** – on its most profound level, the Vedic Literature are the reverberations of self-referral consciousness. These were cognized by the ancient *Rishis* and passed down through the millennia in an oral tradition of Vedic Paṇḍits. In recent years, the sounds of Veda have been written on manuscripts and printed in books, but the term ‘Vedic Literature’ principally refers to the sounds within the self-interacting dynamics of the Unified Field. Maharishi has identified forty branches of the Vedic Literature, which correspond to the structures and functions of human physiology.

**Vishwa** – Sanskrit term meaning ‘the universe’.

**Vṛitti** – reverberations of consciousness, which can be experienced when the awareness settles down and identifies itself with *Ātmā*, its own inner reality.

**Yagya** – in its most profound sense *Yagya* refers to any evolutionary activity. But it is more commonly known as a set of Vedic procedures performed by Paṇḍits to gain the support of the Laws of Nature, in order to amend or avoid unwanted tendencies before they arise.

